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The MODERN HOSPITAL

Vol. X

June, 1918

No. 6



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* United States Public Health Bulletin No. 69, May, 1915.

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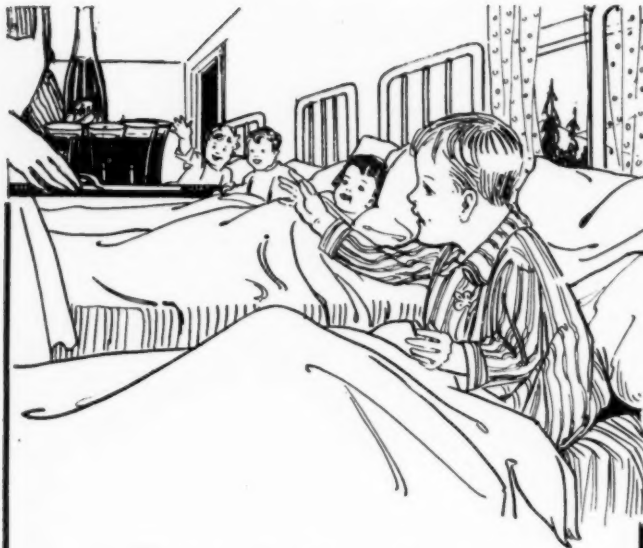
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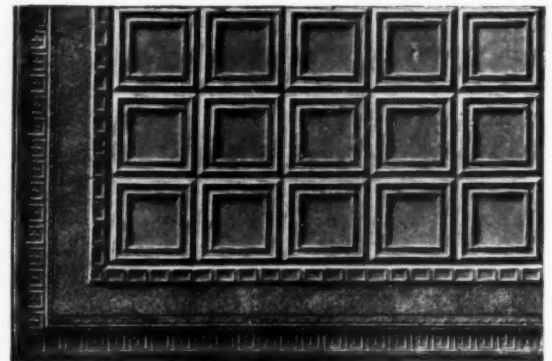
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THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment, and Administration of Hospitals, Sanatoriums, and Allied Institutions, and to their Medical, Surgical, and Nursing Services

Vol. X

June, 1918

No. 6

THE NURSING CRISIS

Insufficiency of Supply of Graduate Nurses to Meet War Needs—No Prospect of Adequate Increase—Dangers of Breaking Down Standards—Training of Nursing Aids the Solution

BY S. S. GOLDWATER, M.D., DIRECTOR MOUNT SINAI HOSPITAL; CHAIRMAN WAR SERVICE COMMITTEE AMERICAN HOSPITAL ASSOCIATION; CHAIRMAN COMMITTEE ON HOSPITALS, GENERAL MEDICAL BOARD, COUNCIL OF NATIONAL DEFENSE, NEW YORK.

TWO million Americans are under arms. For the first time since war was declared, American troops are reported to be engaged in active hostilities in large numbers. Immediate preparation must therefore be made for the medical and nursing care of large numbers of wounded men, as well as of the sick. Medical units, with nursing auxiliaries, have been assembled in France in anticipation of this need; many of these units have thus far had little work to do, but their days of idleness will soon be over.

The Surgeon-General plans to set up not less than 200,000 hospital beds in France; 100,000 beds have already been established or provided for in this country, making a total of 300,000—a number approximately equal to the total number of beds heretofore available in the general hospitals of the United States for the care of the civil population. Meanwhile it is reported that the Government will soon put another million men in the field, bringing our total armed forces up to 3,000,000, and necessitating the establishment of 150,000 additional hospital beds at home and abroad. It is the task of the Government to obtain a nursing organization of 50,000 women to serve over 400,000 sick and wounded. This must be done. How to do it is a question which has not yet been conclusively answered.

During the past year the army and navy, with the help of the American Red Cross and the active support of hospitals, hospital committees, and nursing organizations, have been endeavoring to enroll a number of nurses adequate to the need.

The number thus far enrolled is reported to be a little over 9,000, or approximately one-fifth of the total required. The army now announces a drive—an effort is to be made to enroll “not less than 1,000 graduate nurses monthly.” This proposal is all very well, but the expectation that the actual enrollment of graduate nurses will reach any such figure is not justified in the light of the experience of the past year. *The truth of the matter is that the country cannot spare the number of graduate nurses that the army requires, nor can the training schools produce new graduates in sufficient numbers to satisfy the needs of both the military and the civil population.*

For a year the country has been scoured for graduates, and 9,000 have been enrolled! Many of the nurses who have enrolled with the army and navy have been drawn from institutions; some were public health nurses; the remainder were engaged in private practice. Nine thousand in a year equals 750 per month. Is it likely that the pace can be quickened?

“In spite of the fact that only 9,000 have thus far entered the military establishment,” says a recent report on the nursing situation, issued by the Public Health Committee of the New York Academy of Medicine, “a shortage of nurses has already become apparent in the hospitals, particularly in the smaller ones, and in private practice. The American Nurses’ Association has looked into the matter of the shortage, and reports that until several months ago most of the registries had available nurses, but since then all

of the nurses are busy all the time." In New York recently it took forty-eight hours and the combined efforts of seven registries to produce two graduate nurses for a desperately sick patient, and this is not an isolated case. Letters from all parts of the country tell the same story. The flow of nurses from civil to military hospitals will continue, and should be encouraged; but urge as we may, the stream will diminish and not increase in volume during the months to come—it cannot be otherwise. From this source the needs of the army will not be supplied in full measure.

If graduates are not now available in sufficient numbers, why not produce more? The suggestion is not new. The efforts of the military authorities, of the American Red Cross, of the Nursing Committee of the Council of National Defense, and of cooperating local committees have not been confined to the enrollment of ready-made graduates. A heroic attempt has been made to increase the graduate output, or, at any rate, to prepare to increase the future output, by augmenting the undergraduate enrollment of the country's 1,500 training schools. Those who believed that this effort would meet the necessities of the case did not subject their program to a sufficiently critical analysis. To catch up with the military program, the enrollment of nurses for military service during the coming year will have to be nearer 2,000 than 1,000 per month. Older graduates are not obtainable. What can the schools furnish? The number of pupils now enrolled in the training schools of the country is reported to be approximately 40,000. Of this number considerably more than one-third are probationers and juniors, about one-third are intermediates, and considerably less than one-third are seniors or near-graduates. The schools cannot be expected to turn out more than about 11,000 graduates annually. What will become of these?

Of the year's 11,000 graduates, some will marry and will be lost to the profession; a certain number (more than in prewar days, when attractive business opportunities for women were fewer than they are today) will take up gainful occupations other than nursing; some will enter the field of public health nursing; a group will remain in hospitals, where they are needed to take the place of graduates now in the military service; a large proportion will engage in private duty nursing; and the remainder will enter the military service. Is it reasonable to suppose that the army will succeed in winning over more than one-third of the total number of newly-made graduates? My estimate is one-third; the average estimate of three experienced training school principals is one-fourth.

The principal alumnae associations in New York recently made a concerted and successful demand for an increase in nurses' wages from \$4 to \$5 per day. Economic conditions justified the increase, but the increase will not stimulate army enrollment.

The insufficiency of the available supply of graduating students is generally conceded, and, as I have already said, efforts to increase this supply have been made. What are some of the measures that have been tried or recommended?

First and foremost is the direct appeal to the young women of the country to enter the ranks of the nursing profession as a patriotic duty. This appeal has been made over and over again during the past year from the platform and through the press, but the results have not been satisfactory. Now, as heretofore, a small proportion of the training schools of the country are receiving applications in excess of their capacity. This fact has led to the suggestion that the training schools increase their capacity by renting additional houses for dormitory purposes—as if the capacity of a school for the thorough training of accomplished bedside nurses could be indefinitely and satisfactorily increased without adding hospital beds! It is true that the hours of hospital duty might be somewhat shortened and the pupils' tasks lightened, but there is a minimum below which it would not be wise to cut down the practical work of the pupil who is being fitted for the serious and responsible task of army nursing.

Is it really worth while, in any broad consideration of the problem, to place so much emphasis on the demand for additional housing facilities when a majority of the schools in the country are unable to obtain even their normal supply of pupils? Within two months the superintendent of a prominent training school in New York has been importuned by not less than fifteen training school superintendents in and about the city to direct to them her rejected applicants! The *New York Times* has published some illuminating letters from smaller hospitals that are in desperate need of probationers, with none in sight. The Young Women's Christian Association reports that its "graduate trained attendants are in demand to supplement a shortage" in the hospitals.

In November, 1917, a statement issued by the Committee on Nursing of the General Medical Board of the Council of National Defense credited the training schools of the country with an increased enrollment of 2,600 over the previous year—this, after more than six months of actual war, during which period persistent and intelligent efforts were made under the direction of some of the

ablest women in the nursing profession to increase the number of pupils in every part of the country. By all means let these efforts be continued and accentuated; but, in estimating the probable results, let us not forget the general condition of the country and the opportunities that are opening up for women in every direction. Two million men, who have formerly been identified with business and industrial interests, have joined the colors; another million is to follow. Many new industries have sprung up in consequence of the war. The gainful occupations that are open to women are more numerous than ever before. Industry, business, and the professions during the coming year will compete with training schools as never before for the services of women who wish to be self-supporting.

In brief, there is not the remotest prospect that the problem will be solved by a suitable increase in the number of pupil nurses unless the prevailing standards of admission and of training, laboriously built up through a generation of effort, are deliberately broken down and cast aside. On such terms pupils in large numbers can be acquired, and on no other. But if the number of pupil nurses were increased during the next twelve months by as much as 50 percent, or 20,000, this would offer no solution of the problem unless 20,000 advanced pupils now in the schools could be safely delivered over to the military service. This has been proposed, and there may be some way of getting it done, but, if there is, the censor has seen fit to keep it dark. Most superintendents, having parted with a large proportion of their supervisors and graduates, have a very natural inclination to hold their senior pupils. If the seniors can be dropped without injury to nursing standards, then the three-year course is a humbug and an imposition. I, for one, do not think it is; I believe the third-year pupils are still learning.

Two extremely perilous proposals have thus far been made in this connection. The first is that the established requirements for admission to the training schools be temporarily lowered or suspended. I will not argue against this; I will merely say that I am against it. The second is that the army add to its payroll a sufficient number of "practical" nurses or attendants. Such women, without full professional qualifications, have a perfectly proper place in the scheme of civil life—a place which unfortunately has not yet been plainly marked out for them by law, but which should be, and, I trust, soon will be; but the Government can ill afford to accept them as nurses, not only because of the bad effect that their acceptance would have on the morale of the

medical and nursing departments of the army, but because of the position that their service in the army would give them, the claims that it would enable them to make, after the war. Send 20,000 or 30,000 such women into civil life from the army hospitals after the war, and the difficulty of maintaining nursing standards would be immeasurably increased.

It has been suggested that the Medical Department of the army inaugurate training schools of its own. At first glance the scheme is attractive; on closer analysis it loses much of its charm. If the army school or schools should succeed in enrolling 10,000 pupil nurses per annum, what would be the effect of this enrollment on the existing training schools? It is a question to what extent army schools could attract women who would not otherwise consider entering the nursing profession. The diversion of any considerable proportion of the normal supply of probationers from civil to military hospitals would be disastrous to the civil hospitals and the civil population; besides which, as I shall presently show, the army can secure raw material of a special kind at considerably less expense and without danger to the 1,500 schools now in existence.

How would a huge army training school, with branch schools in all of the cantonments, affect nursing standards during and after the war? An army school could hardly promise training as thorough as that which is given in schools connected with representative general hospitals—the clinical material of the army is too limited. The faculties of the army training schools would be hastily improvised, and would probably be less efficient than those of the civil hospital training schools, which have been developed gradually over a period of years and through many vicissitudes.

There is food for thought, too, in the possibility of the sudden cessation of hostilities—under such circumstances what would be the fate of the army training school pupils? How many of the enrolled thousands would secure admission to nonmilitary schools for the purpose of completing their professional training? What welcome would be accorded them? What allowance would be made for such training as the army might have been able to give them? How many, without more ado, would plunge into private practice? If many adopted the latter course, would not the effect on nursing standards and on the economic status of graduate and registered nurses be deplorable?

There is danger in the suggested army training school, viewed from any angle. If the army schools succeeded in attracting the number of women required to staff the military hospitals of the country during a long war (and it must do

this if it is to succeed in any large sense *without diverting probationers from the civil hospitals*), there would be an excessive number of professional nurses in the community immediately after the war; competition would be intensified, and professional standards would be endangered. If the large numbers that are expected to enroll were not an *additional* supply, but were merely drawn away from the civil hospitals, the civil hospitals and the civil population would suffer immediately. On the other hand, if the number of enrollments were small, the whole project would fail to satisfy the army's pressing needs. These were undoubtedly some of the reasons that led Surgeon-General Gorgas to declare, in an official memorandum dated January 24, 1918, that "the plan of organizing training schools in connection with army hospitals is not believed to be practicable."

I come finally to what appears to me to be the safest and best way out—in fact, the only way out—namely, the training of a large number of non-professional, voluntary war nursing aids, enlisted for the period of the war only, and composed of a class which will not take up nursing professionally under any circumstance, but which is willing to give gratuitous hospital service during the emergency.

Such women can be obtained quickly in large numbers. They can be carefully selected. They can be uniformly trained without expense to the Government; civil hospitals stand ready to furnish the necessary training facilities. War nursing aids should be trained in civil rather than in military hospitals, because not all applicants, however well meaning, will qualify; and by intrusting to competent and practiced superintendents of established training schools the duty of weeding out the unfit, the Government will save expense and trouble. Here is a patriotic service worth doing!

A standard course of training for nursing aids or nurses' assistants has been devised by a group of the best-known and most competent training school superintendents in the country. The American Red Cross has already given part of this course, consisting of fifteen preliminary lessons, arranged to precede the practical ward work, to more than 10,000 women, who have been registered at a dozen or more training centers in the larger cities. In New York city alone nearly 500 have finished the practical as well as the theoretical course, and about half of this number are now actually engaged in some form of hospital work. Two thousand other women stand ready to take up this work in New York city as soon as the hospitals are opened to them.

Among the 1,500 training schools of the coun-

try there should be no difficulty in finding 300 which are capable of training, and which can be trusted to train, twelve nursing aids or nurses' assistants per month, or, say, 150 per annum. With the moral support of the army the hospitals of the country can easily obtain and turn out 25,000 nurses' assistants before the end of the present year, or 50,000 by July, 1919.

The women whom I have in mind belong wholly or almost wholly to the leisure class. They are now contributing nothing to the efficiency of the nation or to the success of the war; yet they are strong, healthy, patriotic, and willing.

They are the only labor reserves that the country possesses, and they can be brought into the nursing field without lessening the available supply of workers for any essential industry. They want to serve the nation, and they should be permitted to do so. The same class is giving valuable service in England—England would be lost, and we shall be lost, without them. When the war is over, the nursing aids will melt away into private life, strengthened and chastened by their experience, leaving the nursing field in the hands of professional nurses. They should be prepared now, for in no other way can the war nursing problem be solved.

Food-Rationing and the Invalid in Great Britain

Some interesting side lights on the rationing system in force in Great Britain are furnished by *The Hospital*, London. For the guidance of hospital committees and private practitioners called upon to give medical certificates for extra allowances of rationed articles, the ministry of food has drawn up a list of diseases and the special foods to be allowed in each. Thus sugar can only be allowed in cases of dysphagia, cancer of tongue, esophagus, etc., and wounds of the jaw. Extra meat and fat can be allowed in cases of diabetes and tuberculosis, celiac disease, and pancreatic insufficiency. Milk can be supplied in any case of acute illness, to suckling and pregnant women, and to consumptives. But certificates can be granted only for periods of one week, unless special permission has been obtained from the local food office. It is interesting to note that the committee consider there is no disease for which cream should be allowed, and that there is no evidence that the present "war bread" is in any way injurious to health, nor that any malady requires bread made from superior flour.

War and Laughter

"Laugh and help win the war," said one optimist. When laughter is not silliness, when it is genuine merriment, over-riding difficulties and dangers, when it manifests courage and a mental attitude of confidence that would simply find relaxation, then is the injunction worthy of every man's attention. The value of a wholesome laugh in terms of health is undoubted.—Social Hygiene Bulletin.

There's only one place in the world where you can lead a happy life, and that is inside your income.

THE NON-RESTRAINT SYSTEM IN THE INSANE WARDS OF NAGASAKI HOSPITAL

Excited Patients Cared for in Buildings Without Barred Windows or Locked Doors— Psychological Advantages of the More Normal Environment—Each Patient Provided With a Special Attendant

BY NOBORU ISHIDA, M.D., PROFESSOR OF PSYCHIATRY, NAGASAKI MEDICAL COLLEGE, AND CHIEF ALIENIST OF THE PREFECTURAL NAGASAKI HOSPITAL, NAGASAKI, JAPAN.

THE Prefectural Nagasaki Hospital is a general hospital with accommodation of two hundred beds and has a prospect of extending it by adding one hundred beds. The medical staff of the hospital consists of the clinical professors of the Nagasaki Medical College, and the clinic and polyclinic for the students are carried on in the former. There was no building for the insane in this hospital until 1912. In 1913 a little building containing but twenty beds for the mentally

ing to this new system, which is now affording the administrators for the insane in Japan material for studying the problem whether a building for the insane can do without those mechanical restraints or not.

Let me explain a few points on which the non-restraint system finds its foundation. It is the practice in all up-to-date asylums in Japan to treat the excited patients at first in the guarded building and remove them if they show much im-



Fig. 1. View from the south of the insane ward of Nagasaki Hospital shortly after opening.

deranged was constructed in the compound of the hospital. It has no guarded windows and no locked doors. Its management under these conditions requires as many attendants as there are patients.

In realizing this design, though on a small scale, I am much indebted to the former superintendents of the Nagasaki Hospital, Dr. T. Tashiro and Dr. Y. Murakami, and my colleagues in the hospital, as well as Mr. K. Hashimoto, a member of the Nagasaki prefectural assembly, who presented the bill to the assembly, otherwise I would have been unable to get some experiences pertain-

provement in their condition to the unguarded building. There is no reason for me to object to this procedure, which is most natural in treating the psychoses. An idea, however, occurred to me concerning this point:

If the excited patient is treated in the unguarded building from the beginning, what will be the difference? The insane, though excited, would be subjected to the impressions of the guarded windows and locked doors, as far as they are not unconscious. If we shall succeed in treating them without burdening them with those impressions, we shall gain by this in itself, not to

speak of the shortened course of the disease, earlier appearance of improvement, etc. I have stood on this point of view and realized it these four years.

The whole building is made of wood. There are twelve rooms and two toilets, which are built according to the European design, as is the case with all other hospitals in Japan. All the rooms are electric-lighted and steam-heated.

An admitted patient has to take a bath to clean himself before he is led to his room, and, if necessary, he is to undergo the continuous bath in a

pean tub, it seemed to me to be preferable, especially in case of insanity, not to subject the psychoses to an unfamiliar tub, which might add something to their delusional ideas, if it is possible to treat them in ways familiar to them. By the way, warm water is conducted to the tub through the adjacent partition under the floor, from the adjoining room, where it is heated by a gas-heater.

Each patient has an attendant. There are five rooms for patients, of which three contain six beds each. The floor of the room, which is ac-



Fig. 2. View of same aspect after in use with gardens of leisure grounds cultivated. The person in white seated and one standing at the right end are assistant physicians. Three nurses can be seen with caps as well as one male attendant in long white gown. The remaining persons are patients.

large Japanese tub which is made of marble. The tub is so large that it is possible for three patients to take a bath at the same time, lying on the cloth which is hung in the water. Quieter patients take baths in twos and threes at once, time being divided for male and female patients. When we have to do with an excited patient, it is easy to take off the cloth, allowing him to take the whole tub to himself, so as to give him much more space than the single tub, and this is repeated until he becomes quieter. Since the Japanese, except in small number, are not accustomed to the Euro-

commodated with six beds, is divided into two parts, one containing three European beds, while the other half is provided with Japanese mats on which three futon (bed-cloths) are spread.

Six patients live with six healthy individuals in one room. The patients are not left to themselves, as is the case with almost all asylums, supervised by a nurse; they find themselves in society with healthy people. This is especially intended for dementia precox patients who are considered to be in need of normal stresses.

So it will be easily understood that what may

seem to be too many hands are intended not only for the purpose of preventing dangers and accidents from the side of the patients, but they are themselves helping hands for the overpowered normal sphere in mind of the patients, as far as it is accessible. All these male and female attendants are put under the control of one female head nurse and four assisting female nurses.

I am in the habit of going to the wards with a stethoscope in one hand, even in case of not using it, for the purpose of presenting a symbol of the physician to the eyes of the patients. I think that this will make the more vivid picture of a physician than to go without, even for the

intendent when I was an assistant in the Tokio Sugamo Asylum, and it was adopted. The calendar does not allow any pretense on the part of patients during the examination of time orientation in another room; and it may also be in use for attendants to notice whether patients are beginning to pay attention to the calendar or not.

Besides the rooms for the patients, we have one room for dispensary, one laboratory, and one small green-house for plants and flowers, together with rooms for physicians and nurses.

It seems to me the atmosphere is more pleasant in this system than it used to be in my country. There has been no suicide in this building since



Fig. 3. Prolonged bath. The tub is marble. The pipe shown in one corner is now carried under the floor.

patients who are able to recognize their physician, since their mental life is, as is well known, apt to undergo momentary changes under the sway of unhealthy ideas. I try to feel the pulse of each patient whenever I visit him, from the same reason as well as from necessity. All these are meant to stimulate insight on the part of the patients.

To almost all the dementia precox patients are administered the saline infusions seven or eight times each at most at suitable stages.¹

There is a calendar in each room, hung on the wall for the patients. I proposed this to the super-

its opening. Many eyes and hands prevent patients at the first attempts at suicide. Besides this, the number of attempts at suicide has gradually diminished, year by year, showing fifteen cases in the first year, four cases in the second, and only three cases in the third year, the number of patients being double in both the second and third year those in the first year.

Let me quote here the truthful words of Dr. Edward N. Brush, "Among the special features of hospital care should be mentioned the influence of the institution," before I conclude this article with the following words: If the non-restraint

¹Am. Jour. Insan., January, 1917, LXXIII, No. 3.

system is an ideal one in treating the insane it would be suitable to apply it to the construction of asylums, and time may show that certain separate symptoms which are ascribed to certain types



Fig. 4. View in ward corridor looking into gardens. The door at right leads to prolonged baths.

of insanity may turn out to be the results of the building in which the patients are treated and their general environment.

I express my gratitude to Dr. Edward N. Brush for his kind-hearted interest and encouragement shown to me.

The New Nurses' Home of Abingdon Memorial Hospital

By O. M. FRICK, R.N., Superintendent, Abingdon, Pa.

In our new nurses' house we have thirty bedrooms and a room with a sewing machine for the use of the nurses during their leisure hours.

We have a large room which is used for a class and demonstration room, and a large living room.

All the bedrooms are single. The furniture consists of a single bed, bureau, table-desk, with a study lamp and a colonial rug for each room. Each bedroom has a large closet, and a stationary wash stand with hot and cold water.

There are three shower baths and five bathtubs. A tennis court is laid out on the rear lawn. No diet kitchen was provided.

THE ROTARY INSTITUTE FOR CHEST DISEASES, VANCOUVER, B. C.

Intelligent Action by a Progressive City Club—Many Admirable Features of New Institute

By MALCOLM T. McEACHERN, M.D., C.M., Superintendent Vancouver General Hospital, Vancouver, B. C.

The province of British Columbia is taking more than usual interest in struggling with the problem of tuberculosis. Because it is an attractive coast city, a great many people go there for their health and, becoming attached to the climate, take up residence. The government of British Columbia has just arranged with all the hospitals in the province to set aside at least one-tenth of their beds for the advanced tuberculosis cases, and they have built sanatoriums for the incipient cases.

In the city of Vancouver, it was found that there was not sufficient machinery to round up cases early enough to prevent them from becoming advanced. This problem was taken up by the Rotary Club, who are a very live bunch in the city, and after ten months' investigation and planning it was decided to establish the Rotary Institute for Chest Diseases, through the organization of which there will be all possible machinery to cope with the question of early recognition of the disease and its prevention.

The members of the club themselves started out the campaign with a subscription of \$15,000, and challenged the city of Vancouver to give the remaining \$60,000. An energetic four-day campaign by the members of the Rotary Club resulted in the raising of the required amount, and in a few more weeks Vancouver will have a most attractive and up-to-date Rotary Institute for Chest Diseases.

This institute will be established in a downtown section where it will be easy of access to any person wanting to come. A free tuberculosis clinic will be held daily, which will diagnose doubtful or suspected cases early, and will administer such medical treatment as is required. It will supervise patients in their homes and serve as a clearing house for hospitals and sanatoriums. It will also provide a roof garden day school for children who have been exposed or in contact with tuberculosis in their families. In short, the idea is that of a "preventorium," together with the fostering and developing of an educational propaganda. The institute will be in charge of an expert who will devote his entire time to the work and will have a number of nurses and others to assist him. The building will be provided with sun rooms, dietaries, educational rooms, x-ray, laboratory, examining rooms, and all necessary facilities.

The campaign that has just closed was most successful financially, but, what is even more important, it carried the educational feature of the question of tuberculosis into every home in the city. The last day of the drive consisted of an expedition of four hundred automobiles and some fifteen hundred collectors, who called at every home in the city of Vancouver, and who, besides receiving subscriptions, told about the institute and what it was for. In this way a great educational campaign swept Greater Vancouver, which no doubt will bear fruit.

The reconstructed life is energy's second wind; what is mended is stronger than ever. We are sure of nothing that we have not taken apart and put together again. The sound life is one that in at least some portion of it has been rebuilt; not until a breakdown do we acquire endurance.—Stephen Berrien Stanton, "The Hidden Happiness."

THE STANDARDS OF HOSPITAL EDUCATION FOR INTERNS*

What May be Expected of the Hospital of Seventy-five Beds and Over—Clinical and Laboratory Service Which the Hospital Should Furnish

BY JOHN M. BALDY, M.D., PRESIDENT OF THE BUREAU OF MEDICAL EDUCATION AND LICENSURE OF PENNSYLVANIA, PHILADELPHIA.

HOSPITALS have been established in their several communities to fulfill various needs and being organized for the fulfillment of certain specific functions, they are oftentimes so constituted as not to be a proper place in which to educate an intern. In the effort to obtain a competent course of instruction for an intern this fundamental fact must be recognized, namely, that, in justice to themselves, in justice to their communities, and in justice to the prospective intern, not all hospitals can assume the educational function. Hospitals having been developed with one function in view, it becomes an exceedingly difficult matter in many instances in view of the vision of their managers, the funds at their disposal, and the character of their medical and surgical staffs, to assume a second and distinct function.

In a discussion of this subject it becomes essential to consider first some of the general fundamental facts in regard to internship, and the first one in natural sequence is the minimum number of interns any given hospital should employ in order that it may give a proper and comprehensive service. As a rule it may safely be assumed that a thoroughly satisfactory internship cannot be given with less than four interns. For the internship to be thoroughly satisfactory this is an irreducible minimum.

A basic internship grossly divided into four divisions, the laboratory service, the medical service, the surgical service, and the obstetrical service. The service should be a rotary one, the intern rotating from one department to the other. The service in the laboratory should be exclusively a laboratory service, with absolutely no other duty of any kind whatever, the intern being answerable to the chief of the laboratory and being entirely freed from any responsibility to the superintendent or head of any other department during this period. The effort to combine the laboratory service with one of the practical services in a thoroughly satisfactory internship has proved on actual trial to be a failure.

There should be a minimum of twenty-five beds per intern in the hospital. This would allow a hospital with a capacity of seventy-five beds to be classified as being competent to give a reliable

intern service, for the reason that while the intern is serving in the laboratory he is not encroaching upon the average of twenty-five beds, which average would still obtain as far as the other three interns are concerned.

In considering the education of the intern it is impossible to lose sight of the interest of the service of the hospital. The two are so closely interwoven that both must receive proper consideration. If the hospital service is not properly cared for, then it goes without saying that the hospital cannot do its duty from the educational standpoint to the intern. Consequently, if the hospital have the minimum of the above four divisions of service, there must be available an intern for each service. Not only is the service of the hospital incompetently carried on if there be not a sufficient number of interns employed, but this same difficulty must be faced where a sufficient number of interns have been originally employed and one has been discharged or has left the service. The usual course pursued by the hospital under these circumstances is the dividing up of the work of the departing intern among those remaining, to the disorganization of the hospital service itself and the interruption of the proper interests of the intern. Under these circumstances there is but one thing to do in order that the usual routine of the interns be continued uninterruptedly, viz., that the service deserted by the departing intern be left entirely without the service of an intern, the work to be supplemented by the staff in that particular department. It is far better, both for the hospital and for the intern, that each service shall in rotation be without an intern for two or three months, rather than that the whole system be disorganized. If it be contended that an intern having departed, his service must be assumed by others, the answer is perfectly apparent: what would be done if all the interns left? Surely no one would seriously consider closing the institution. An institution pretending to give an education to the intern which will exploit its interns in any such manner deserves to be left without any. The contract is a mutual one and the day has long since passed when labor can be exploited; surely intern service is not to be considered lower-grade service than any other labor.

This preliminary statement as to the number

*This paper is the second in a series, by various authors, on the standards of the various classes of special hospitals. The first article, "Standards for a Children's Hospital," by Stafford McLean, appeared in the May issue.

of interns and the division of services of the hospital is purely tentative as a working basis on which to consider the whole subject of intern education. It does not mean that a good internship could not be obtained in a smaller institution or one organized on a somewhat modified basis. It does mean, however, that any hospital organized on a different basis or smaller in capacity of service is an exceptional hospital of its kind in which a satisfactory internship may be obtained. The genuine test point of the efficiency of such a contemplated service will rest entirely with the personnel of the medical and surgical staff and their willingness to give extra service and attention to the intern. I am sorry to say this is practically found in but exceptional cases. It is perfectly conceivable with a limited hospital staff composed of men who are practicing medicine scientifically, enthusiastic and imbued with the spirit of teaching, that an intern might obtain a very excellent service with an institution of even twenty-five beds and the proper scientific laboratory adjuncts. There are such institutions ranging from twenty-five to fifty or sixty beds in which there are two or three physicians working, one of whom is familiar with laboratory and x-ray routine, wherein a single intern is being most excellently instructed. It must be remembered, however, as already stated, that these institutions are so rare in comparison with the total number of hospitals existing that, in considering the general proposition of a proper internship, it is necessary to leave them out of consideration, merely noting the possibility of the exception. Such an institution being an excellent one today, a single member of the staff disappearing for one reason or another, the institution becomes an impossibility from the intern viewpoint tomorrow. It is not necessary to consider the service of larger hospitals by themselves, but like the very small ones, they may be dealt with as deviations from the standard. After all, they are largely to be considered as in the light of multiplications of a basic unit.

A prerequisite of an intern service is the organization of the hospital service. It may be stated in general that all special hospitals may be excluded from consideration, excepting as fulfilling a partial function. For instance, an eye hospital could only be given credit for a certain number of months on a general intern service. The same may be said of an obstetrical hospital, a children's hospital, etc., as well as those institutions which purport to admit all classes of patients, but which as a matter of fact on investigation are found to be confining 70 percent to 80 percent of their service to surgical work. Such institutions should be classified as special hospitals and dealt with on

a basis of a limited amount of credit. In other words, no hospital can be considered as giving a thoroughly satisfactory intern service which does not have the four principal departments already named: medical department, including all the medical specialties; surgical department, including all the surgical specialties; obstetrical department; laboratory departments.

It may be stated at once that any hospital which has not a fixed and definite medical and surgical staff assigned to the work in the various departments cannot be considered as competent to give a satisfactory internship. This practically excludes all so-called open hospitals. It does not, however, exclude that type of hospital which has a fixed staff at least of the four departments named, but which in addition allows outside physicians to admit patients to their private room departments, it being thoroughly understood that such private beds are not counted as part of the minimum twenty-five to each intern. In the main, the so-called "one-man hospital" will have to be excluded, excepting, as already intimated, as in the class of exceptional institutions. The value of the service in such an institution depends entirely and absolutely upon the incumbent generally known as medical superintendent or chief surgeon. Not only is the organization of the staff in such a hospital fundamentally faulty for intern teaching, but it is a well-known fact that most such institutions are purely surgical hospitals and therefore are objectionable on this second ground and should be classified among special hospitals, being given a limited amount of credit for their service.

Returning then to our basic hospital—a hospital with the four departments already named, manned by a definite medical and surgical staff appointed because of their experience in the various lines of work to which they are assigned, with a minimum of seventy-five beds, with a minimum of four interns (one for each department)—we are in a position to consider what may be expected from such an institution, first, in the way of equipment; second, in the way of instruction of the intern. In dealing with this element of the subject it will be very shortly realized that the problem to be solved is largely one of administration and not one of finance. Let no one be deceived in this matter. Little difficulty will be found with boards of managers when once the advantages and the necessities are properly brought to their attention; as staff members are found to realize the advantages opened to them and the demonstration is forthcoming that the service rendered is redounding to the advantage of the patients, the necessary funds will willingly

be provided. The great and crying reform, sad to tell, is development of efficiency and intelligence of service by those already compensated—the superintendent and the staff members.

If the fundamental truth of the matter be grasped, it will become evident that the movement for the education of the intern means also a movement in the direction of the education of the staff, as well as of the superintendents. In this respect, where this movement has been put into intelligent force, great improvement is already noted. Where physicians had a minimum of laboratory knowledge and were difficult to secure, more and more are becoming available and not a few have given up the practice of medicine and are devoting themselves to the scientific side of the profession. Where primarily it was difficult to secure technicians, schools have sprung up for their instruction, and they are becoming more and more numerous. The development in the x-ray personnel has progressed with equal satisfaction, and few communities exist in which there are not one or more physicians competent to undertake and carry on this work.

Staff men in general are becoming more and more awakened to their responsibilities, both to the patient and to the intern, and are in consequence rendering more satisfactory service; the general improvement in the attitude of superintendents is marked and the influence on the attitude of hospital managers is shown by the sudden disappearance of many former inflexible superintendents.

EQUIPMENT

First, as to equipment. The equipment of hospitals in general need not here be considered, attention rather being given to certain specific departments, namely, the laboratories (pathological and x-ray), the obstetrical department, the anesthetic department, the record department.

Pathological Laboratory.—This laboratory should be equipped not only for the conduct of ordinary chemical and microscopical clinical diagnosis (urine, gastric contents, feces, sputum, cerebrospinal fluid, transudates, and exudates), but also to conduct bacteriological and serological examinations and tissue work, as well as a competent amount of physiological chemical work. Equipment for the conduct of all this work may readily be obtained for a sum within the limits of a thousand dollars.

The head of the laboratory should be a physician competent to conduct all of the various tests conducted in modern clinical medicine under these various headings. If it be possible that he devote his full time to the work of the laboratory, it may be possible for him to do his own technical

work. Ordinarily, however, a hospital of the size under consideration cannot afford or has not available such a man. The solution, therefore, lies in the employment of a technical assistant. A laboratory technician is easily possible to any hospital which may claim to have the possibilities of intern instruction. Such material may be drawn from among trained nurses or young women having had a high school, or, better still, a college education. Five or six months in attendance upon a school or laboratory instructing technicians, would prepare the technician to perform competently all of the technical work of such a laboratory as is under consideration, even including Wassermann work. With such an assistant working full time in the laboratory, it would be necessary for the physician at the head of the laboratory to devote but a few hours a day to interpreting the results and giving instructions for coming work. The services of the technician would cost the hospital not more than from \$50 to \$100 a month. Her education can be secured for an outlay of several hundred dollars, involving an expenditure of time of from five to six months. The services of the physician at the head of the laboratory may be arranged either on the basis of fees for the work done on private patients, or on the basis of fixed compensation, the hospital absorbing all fees. The latter is far the better arrangement. Such a laboratory conducted on strictly business principles can in most instances be made to pay the cost of upkeep and in addition at least the salary of the technician.

The plea has often been advanced that a physician with competent knowledge of laboratory work is not available. This is a real difficulty. However, if opportunity be not given the physicians who have a moiety of laboratory knowledge to utilize and increase that knowledge, the time will never come when there will be any improvement over the present status, and two decades hence we shall be just as deficient in competent laboratory men as we are at present. It is possible in communities containing two or more hospitals that a physician may give his divided attention among the several institutions. Where a community may not have available a physician familiar with the findings of the laboratory, an arrangement may be made with some nearby laboratory by which the tissue and other work, after being prepared by the technician, may be submitted to the head of this laboratory for his interpretation. A laboratory organized on the above plan is perfectly feasible and within the limits of possibility. If an arrangement be attempted whereby a neighboring or city hospital perform the work, the invariable result is that

the pay patients receive the benefit of the work, the ward cases being in part or more often entirely neglected in this respect, and the intern loses both the experience and the influence of the environment.

Roentgenologic Laboratory.—The x-ray laboratory may be completely equipped for picture work, treatment, and fluoroscopic work for sums ranging from \$1,500 to \$2,500. The personnel of this laboratory is generally easily provided for and compensated on the basis of the percentage of fees charged and collected for the work performed for those able to pay. The proper system is that the hospital render all bills and collect all moneys and pay over to the head of the laboratory such percentages as have been agreed upon. This division should provide a sufficient percentage for the hospital in order that the laboratory be properly kept up. The general average arrangement is 40 percent to the hospital and 60 percent to the head of the department, which arrangement seems to be satisfactory where it has been established.

Again, as in the case of the pathological laboratories, the cost of the x-ray laboratory to the institution is in exact proportion to the competency of the business management of the institution, and, provided the deficit in either department is not a large one, there should be no cause for complaint that the laboratories are an expense to the hospital. The upkeep and personnel of the kitchen, the upkeep and personnel of the boiler rooms, the upkeep and personnel of the superintendent's office and every other department of the hospital are an expense to the institution and are provided for from the general funds, and there is no reasonable theory that can possibly be advanced that would exclude the scientific departments from their proper participation in the general budget. If, then, the cost of these departments in one institution is more than in another, the business acumen of the individuals conducting the former institution should be critically examined. It may be stated and should be made fundamental that the institution that cannot afford the proper scientific departments as herein laid down has no claim whatever to an intern and has no right to consideration in considering the intern proposition. Things worth having in this world are rarely obtained for nothing. If the hospital expects the benefit of the service of the intern, then it must pay for it, and the payment asked in this connection is the proper opportunity and education of the intern. The organization as suggested is perfectly feasible for any institution of seventy-five beds or more, and any plea to the

contrary is a specious one and should be disregarded.

Records.—This department should have as its head some proper employee of the institution upon whom shall center the responsibility for its intelligent conduct. A system should be developed by which records from all the several departments of the institution, including the laboratories (both pathological and x-ray) shall automatically come to this department in order that the responsible head may be in daily touch with the facts as to whether or not individuals throughout the institution responsible for making up these records are consistently attending to their duties. No patient should be discharged from the institution without the facts as regards his or her records having been checked up in the record department and any deficiencies in this respect promptly rectified. The system should be so developed that it shall not be possible for any single department in the hospital to neglect this most important part of its functions without the neglect being promptly noted. The system should be comprehensive enough to provide by cross-indexing that one may be able to proceed with equal ease from the record room (in the case of any individual patient) to the specimens, slides, and records kept in the pathological laboratory and to the plates and records kept in the x-ray laboratory, as well as to start from the laboratory records in these laboratories and to proceed promptly to the proper records in the record room.

Obstetrics.—The obstetrical department should be a distinct and separate entity. The department should contain a properly equipped delivery room, as well as a nursery. The head of this department should have one or more properly qualified assistants in order that a responsible physician may be present at all deliveries.

Anesthetics.—The anesthetic department, being an adjunct to the surgical service, belongs properly to and is generally provided for in the operating suite. The department should be organized on the basis of a responsible head, consisting of one of the surgical staff, together with an assistant anesthetist who shall be largely responsible for the actual giving of the anesthetics and the teaching of the intern. Such an assistant may properly be a trained nurse who after her training has been especially educated in the giving of anesthetics. The wage of such an assistant would be largely that of a trained nurse employed in the other departments of the institution, increasing in amount as her services become more and more valuable. Such an assistant in the smaller institutions is available for other services in the nursing

department at such times as she is not fully occupied with the anesthesia.

DUTIES OF THE INTERN AND HOSPITAL STAFF

Records.—The efficient keeping of records of the cases admitted to the house service is basically essential to the education of the intern. It is not out of the way to estimate that 30 percent of the benefit derived by the intern from his education in the internship is involved in the record-keeping, and the proper conduct of this function should be remorselessly insisted upon. No service of the intern can be considered competent which does not take into consideration history-writing. It is only by the intern's actually noting on the history sheet the history of the patient, the physical findings, and the conclusion arrived at as to diagnosis that the chief can obtain a competent idea, first, of the basic knowledge started with by the intern, and then of the progress he may be making, and consequently the degree to which he may be trusted. On the admission of a patient to the wards of the hospital it becomes the primary duty of the intern promptly to see the patient, to take the history as well as the physical findings, and to note them carefully upon the proper sheets. No excuse should be accepted for failure to perform this function, and the intern who neglects it should be promptly disciplined.

The notes thus taken should be available at the bedside when the visiting physician makes his first visit. In making his examinations the visiting physician should have in hand the findings of the intern, primarily note the results, and, during his investigation should compare and check up the intern's findings with his own, calling the attention of the intern to the discrepancies, and having him re-examine for certain points where necessary. The future conduct of the case, operative or medical, should consist in the discussion with the intern of the benefits of the treatment primarily applied, of the necessities for any change, and of the results looked for by such changes—all this in view of the actual notes as to the progress of the case made by the nursing and intern departments. As a routine, if the history is not prepared by the intern and ready for his chief, it should be the duty of the chief to decline to examine that patient (excepting in an emergency) and demand of the superintendent that the intern drop anything at which he may be engaged and proceed promptly to the taking of the history. Where it is understood that such action will result, this type of neglect will rarely occur in that institution. In no other way can the staff member obtain a competent control of the intern's service.

The history sheet of the intern should contain the O. K. of the visiting physician, and the fact that it is missing should be sufficient evidence to the record department that the staff member himself is not performing his proper duties either to the patient or to the intern. After the physician's attention has been called to the matter (if the offense be frequently repeated) the fact should be promptly transmitted to the superintendent and through him to the board of directors for their information and proper action. Any hospital which does not secure such service from its staff members fails administratively and cannot pretend that what they are being asked to do is a hardship—unless it be considered a hardship by the board of managers and the superintendent that they be called upon to give intelligent thought to the responsibilities which they have voluntarily not only assumed, but in most instances sought. The intelligent conduct of the history work on the part both of the intern and of the staff is an index to the competency of the work being performed on the patients, and slovenliness and neglect in this department is sufficient cause for the rejection of any institution in considering its availability for conducting intern education.

Laboratory Work.—In the laboratory department there should be demanded of the intern during his service that he first witness and then carry out under the guidance of the laboratory workers all of the tests performed in the laboratory; that he be given more and more responsibility as his experience warrants in making the simpler clinical tests such as the chemical and microscopical clinical work; that the tests he is performing in the advanced work be carried on concomitantly with the work done in the laboratory and his technic and results checked up with the work of the technician or the head of the laboratory. Complaint has been made that the results of this more advanced work cannot be relied upon when done by the intern. It is neither desirable nor necessary that it should be. He is there as a student, and as the work is being performed in the laboratory, the material is perfectly available for him to do it a second time and at the same time, in order to get the benefit of the check-up. This is certain: that the intern, having learned the laboratory methods in his school, having gone into his intern service and seen nothing of it as applied to the practice of medicine, having not carried out any of the technic himself, will leave that institution imbued with exactly the same ideas of the scientific practice of medicine as he has acquired in his environment, and it will be but a short time before the majority of such interns degenerate into practicing medicine on the

basis that it was practiced by their chiefs in the hospital. If, for instance, an intern in his hospital service has seen but two or three instances a week in which the Wassermann reaction has been made, he will leave that environment lacking a proper appreciation of the importance of Wassermann work in the practice of medicine and will conduct himself accordingly in his own future practice; and so in regard to all other tests. It is often stated that interns will not do this advanced laboratory work in the practice of medicine. This is true, and it is hardly desirable that they should. It is desirable, however, that they should carry with them into the practice of medicine the benefits of the stimulus of a scientific environment and a sufficient knowledge of the technic of the various laboratory methods in order, first, to know the importance of their use, and, secondly, to be able to judge of the competency of the men whom they employ in future to carry out these tests for their patients.

In the x-ray laboratory it should be one of the obligatory services of the head of the department to see that the intern accompany his patient requiring x-ray work to the laboratory; that he see and be instructed in the dangers of too frequent, too close, and too intense application of the rays; that he be made familiar with all the technic of the picture-taking and the treatment; that he be taught thoroughly the reading of the plates and the difficulties of interpretation; and that he take away with him a comprehensive idea of the development work.

This touches pertinently upon the responsibility of the staff members, heads of pathological laboratories and x-ray laboratories, all of whom not infrequently object to the trouble created for themselves personally by the presence of the intern and the necessity of his instruction. In employing such heads the hospitals are warranted in demanding under contract that this be an essential portion of their duties.

Obstetrics.—The ordinary service in the obstetrical department is an utterly incompetent one both for the benefit of the patient and for the instruction of the intern. It cannot be counted as a difficulty to any hospital, large or small, that it administratively sees to it that its staff perform its duty. The ordinary situation existing in the obstetrical department is: an obstetrician in charge. Patients applying are seen in the dispensary or receiving ward by the intern and admitted to the house at or about the time the patient falls into labor; or the patient is seen by the obstetrician in his own office and referred to the hospital to be admitted on some later date. Within a short period after the patient is admitted to the hospital, labor begins (she having been

seen or not by the obstetrician) and she is sent to the delivery room. The chief is called on the telephone by the intern and notified of the fact. After a short talk, it is mutually decided that the case is a normal one and the intern is instructed to "go ahead." In case of subsequent difficulty and necessity of instrumentation the obstetrician is again summoned and then comes to his patient. In moderate-sized and small hospitals and only too frequently in large ones this is the sum total of the service.

Such service is utterly inadequate and incompetent from every point of view. It does not conserve the interest of the patient; it does not protect the interest of the hospital; it does not educate the intern—in fact, it is a detriment to the intern.

No hospital, however small, except in emergency, should admit an obstetrical patient to the wards and transfer her to the delivery room without her having been first submitted to all of the proper prenatal examinations by the chief or one of his responsible assistants. If there be a prenatal clinic (which should always be the case), the intern in attendance should in every case, either in the clinic under the eyes and checkup of the chief or assistant, make the prenatal examinations; or if the case be admitted to the house primarily, the intern should make this investigation, note his findings accurately on his obstetrical sheets, and, excepting in the case of emergency, such patients should not be admitted to the delivery room until the chief or his assistant has checked up the findings of the intern and called the attention of the intern to his mistakes, if any be found.

In no instance, excepting in emergencies, should the intern be trusted to conduct the work of the delivery room without the presence of a responsible physician, be the case a normal one or otherwise. It is important for the education of the intern that he be competently instructed repeatedly in the conduct of the normal case. Without a competent knowledge of the conduct of the normal, he is utterly unfit to decide as to the abnormal. For the hospital to tolerate that the question of normality or abnormality be settled over the telephone wire between the responsible physician and the intern is such a demonstration of incompetency in the way of management as is uncalled for in any institution which asks for consideration as being competent to give an intern service. The whole conduct of the obstetrical department of the hospitals of the country must be reorganized on the proper basis, and this should be one of the prime demands of anyone evaluating the service of a hospital for intern teaching.

Surgical Work.—In the surgical departments it may be asked of the hospital that it enforce on their surgeons that the intern at least be given a minimum opportunity for education of a type which will devote the first third of his service in the surgical department to the duties of the position of a second assistant; the second third to the duties of a first assistant and in the final third that he be given an opportunity by the surgeon to perform some of the less serious operations himself, with the surgeon assisting and directing him.

Anesthesia.—The intern is a student of anesthesia and cannot be considered in the light of being competent to be trusted in this service by himself as long as he remains in the hospital. His service in anesthetics usually occurs during his period in the surgical department. In the main, the paid anesthetist must be looked to to give the anesthesia, having the intern with her and instructing him up to the point she considers it advisable to trust him with the cone. Excepting in emergencies, she should be present always when the intern administers the anesthetic throughout his full term of service in that department. It

should be her duty, when she is not herself administering an anesthetic, carefully to watch and instruct the intern, not only that he may avoid any complications, but that she may be on hand promptly to aid and to instruct him should any occur. The usual hospital system of having one of the staff or the paid anesthetist instruct the intern for a few days or a week and then turn him loose on his own responsibilities thereafter to administer the anesthetic as best he may is a pernicious one and one to be no longer tolerated. The private patients and the more serious ward cases should be handled by the anesthetist herself, and the intern should be confined in the acquiring of his experience to the uncomplicated ward cases.

As a minimum, it may be said that this rough outline of intern service is perfectly feasible in any hospital of seventy-five beds conducted by an intelligent board of managers, with a competent superintendent and with a staff of medical and surgical men who are worthy of holding such positions. It should be and can be demanded as a minimum, and without it no competent internship will ever be secured.

NURSES' HOMES—A PLEA FOR EFFICIENCY IN THEIR DESIGN*

Unpractical Ideas Exploited in Many Designs—Minimizing of Maintenance Charge a Vital Feature—Home Conditions and Facilities for Recreation Essential

BY MEYER J. STURM, HOSPITAL ARCHITECT, CHICAGO.

THE same process of reasoning and procedure seems to be applied at the present time in the building of nurses' homes as has been applied in the consideration of hospital buildings themselves. There seems to be, for some unknown reason, a tendency on the part of hospital authorities to rely upon very uncertain and limited sources for information as to what constitutes a properly planned and constructed nurses' home. Why there should be any marked difference between the designing and building of such an institution and of hospital buildings, or even a family hotel with modifications, is not patent. In the planning of the nurses' home, it is generally to be considered as an integral part of the entire institution.

There are many vital points to be taken into consideration, however, some specific and some universal, in the planning of nurses' homes, and it might be well to bring to the attention of the

authorities who are contemplating such buildings some of the most salient of these facts. Heretofore, in the planning and construction of all buildings allied with hospital activities, the prevailing thought seems to have been that what was mostly to be desired was a complete institution without any reference whatever as to the future enlargement or expansion of the institution. Why this common error should have been perpetuated is beyond the ken of ordinary human intelligence, and has been one of the most difficult problems for those who have made hospital planning and construction their life work to overcome. There are probably causes for this perpetuation of shortsightedness beyond the control of those who were responsible for the planning of the institution in the past, and not infrequently at the present time.

Ordinarily, there seem to be two reasons for the mistake. First, there is or was a certain allotment of money to accomplish certain ends, and the most that could possibly be obtained toward the desired end was done for that amount of money without any thought of what was required for the future of the institution. As a matter of

*This is the sixth in a series of articles on nurses' homes. The first, "Nurses' Homes and Some of Their Requirements," by Olof Z. Cervin, appeared in January; the second, "Kistler Memorial Home for Nurses of Lock Haven Hospital," by V. Happersett and Louis H. Rush, in February; the third, "New Nurses' Home for Minnequa Hospital, Pueblo, Colo.," by R. W. Corwin, in March; the fourth, "The Helen Newberry Nurses' Home," by Harriet Leck, in April; and the fifth, "The Nurses' Home of the Norton Memorial Infirmary," by Arthur Loomis and Julius Hartman, in May.

fact very little thought is given to the present needs of institutions, judging by some of the examples that we have before us.

The other contributing cause is that committees as a whole are appointed, not for their knowledge of the problem, but because they happen to be representative or influential citizens or members of some organizations who are building such institutions. We need hardly enlarge on this point. There are few boards that have not at least one member entirely useless and in reality a menace to its progress, whose influence is great because he or she is put there with the hope that liberal contributions will be forthcoming in exchange for such "courtesies."

Committees have either consulted with some individual who has had some particular piece of work in mind, or with some architect who had never planned a modern nurses' home, if he had planned any home, and rely upon either one or the other of these sources, or upon the judgment

much written concerning nurses' homes, and it is astounding to find that the opinions expressed in published articles give no adequate idea whatever of what the real requirements of a nurses' home are. The method followed seems to be that someone makes an investigation of one, or at the most, two homes, as near their locality as possible, and as there is no particular merit in any of these homes investigated, and the opinion of such a person is taken as being the proper solution of the problem in hand, necessarily the home is entirely inadequate in every particular. There is no universal panacea for the correction of our shortsightedness of the requirements of such buildings if this is going to continue to be the method of procedure.

Recently, as an example of this very shortcoming on our part to appreciate the problem which confronts us, there appeared an article which went so far as to advocate coal-burning incinerators on each floor of a nurses' home, and in addi-

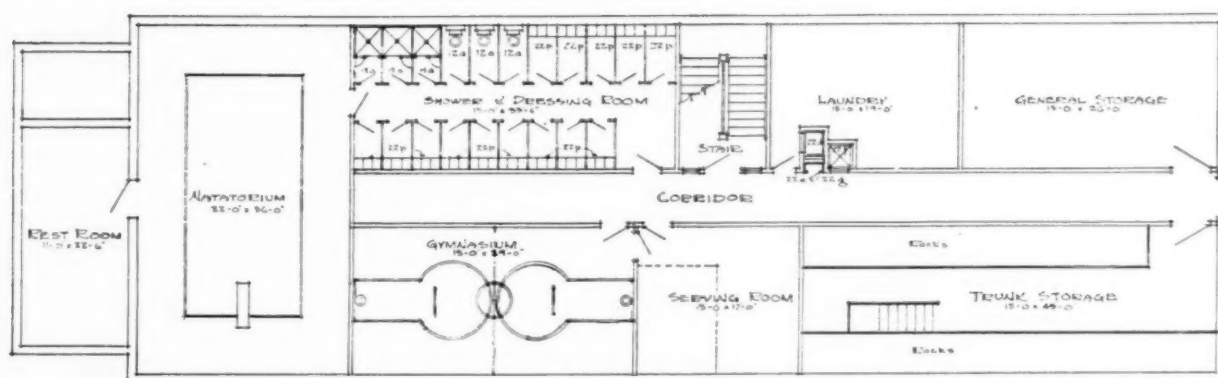


Fig. 1. Basement plan of a nurses' home embodying the essential requirements of such a home. Note the ample facilities for recreation. No kitchen is provided, but merely a serving room for use when the nurses entertain, etc.

of one individual, to gather all of the information necessary for the design of such a building. Usually the investigator is some business man who has not the remotest idea of what is required, and he brings, as his contribution, what he thinks should be done. It is manifest that in either case errors are bound to creep in, and individual ideas, instead of universal necessities, are the result.

It has come to be an axiom that no hospital should be built that has not adequate grounds for the extension of the buildings in the future. No hospital and its allied buildings should be planned that does not carry in its conception the right of growth or expansion, and every such institution should have as its most valuable asset the inalienable right of posterity to continue the work started, and to profit by what has been done before. Whether the building be a hospital proper, or whether it be a nurses' home, the rule applies with equal force.

There has been considerable discussion and

tion to this, that such a frightfully antiquated installation as a dust-chute should be made, and that speaking-tubes should be put into the building, and—"confusion worse confounded"—that "call bells should be a necessary part of the equipment." What refuse would emanate on floors of nurses' homes that would require incinerators is far beyond comprehension, unless it were scratch-paper and envelopes, and these most assuredly could be put into waste baskets and properly disposed of. No one is decrying the usefulness of incinerators for the destruction of refuse in places whence it emanates, but why this should be on the individual floors of a nurses' home is not patent.

In the consideration of dust disposal and sweeping, an inexpensive and light-duty vacuum machine, placed in a convenient space in the basement, with connections on each floor, would be much more healthful, much more sanitary, manifestly more convenient, and surely more modern in its application in the removal of dust, than old-

fashioned brooms, carpet-sweepers, and, above all, dust-chutes. It is safe to say that 90 percent of the fires which started in the older type hospitals came from the dust-chutes, and, while practically all nurses' homes now are being built fireproof, the dust-chute is, from the very fact of this modernity, absolutely obsolete in such buildings, and still it is advocated by the author of the article. Apparently the investigator had found dust-chutes in some institution which was visited, and in his ignorance of the most trivial of modern requirements, took it for granted that it was the proper equipment of a modern nurses' home.

As for speaking tubes and bells, the intercommunicating telephone system is now universally used, and why the former should be recommended, and that within the last year, is another of the points in support of the futility of proceeding with the building of nurses' homes in the manner described.

Whether or not some particular head-nurse in a hospital, or the uninitiated in hospital economics,

tion department for the allotment of supplies could be established that would serve both kitchen departments, but this would create double book-keeping and control, if not endless confusion. Such a suggestion, however, has been made upon the very specious grounds that the nurses were given somewhat different food from that of the patients, and therefore it was proper to proceed with the double cost and double expense for this reason alone. Why the little difference in the preparation of food would have any particular bearing upon such preparation in one kitchen was not explained nor could it be logically. It could be shown, however, that a waste of money for equipment and the consequent double cost of operation was not the correct or logical means of solving the problem, or more important still, the minimizing of operating expense of the institution.

A great many advocates of the separation of the nurses' home from the hospital, even to the extent of one or two city blocks, have not recommended

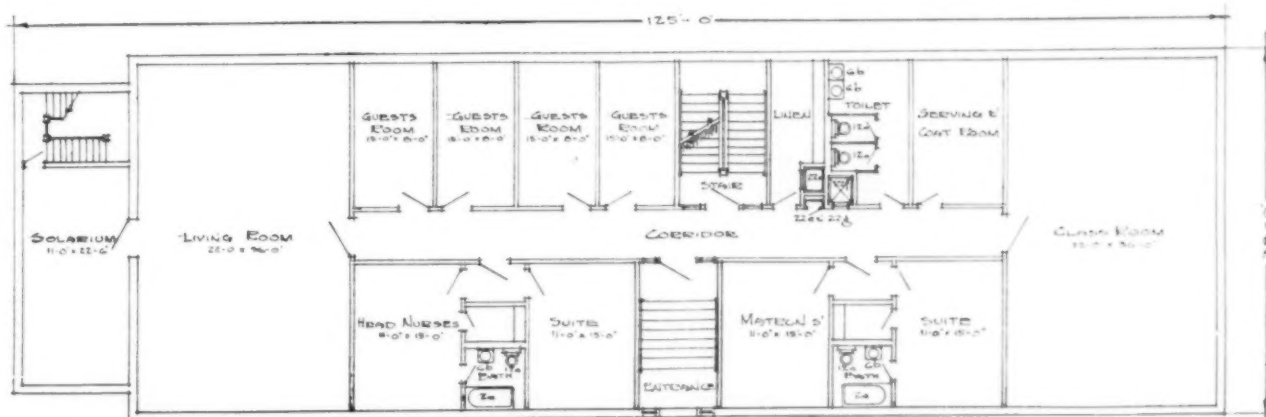


Fig. 2. First floor of the nurses' home, containing, besides the head nurse's and matron's suite, the class room, the living room, and a solarium, several reception or guest rooms.

advocates a dining room and kitchen in a nurses' home, in order that the nurses may or must have all of their meals in the home, it must be patent to hospital administrators that such an arrangement would be far from ideal. Aside from the fact that it would be necessary to have two complete working forces in two separate kitchen departments, one in the hospital and one in the nurses' home, there would be the initial outlay of two entire sets of cooking apparatus and all of the paraphernalia necessary. This would take practically twice as much room for kitchen and storage for the care of all supplies for two as it would for one such department.

The question of a dining room for nurses need be considered only from the point that there is always more room in a hospital, properly planned, for dining rooms than there is in the nurses' home planned in a similar manner. A central requis-

the separate kitchen. The purpose of separating the nurses' home from the hospital has been to get the nurses away from the atmosphere of the hospital entirely during their leisure hours so as not to compel them to live with their work twenty-four hours a day. A small kitchenette where nurses can prepare for themselves very light lunches at such time as they are not on duty, especially on Sunday mornings and late at night, is a great convenience, but this does not entail any extraordinary equipment or space, nor, what is more vital now in these times of the scarcity of help, the maintenance of a complete force and kitchen equipment for this purpose, the equipment including steam and plumbing connections and their operation and maintenance.

One of the most vital features in the minimizing of the maintenance charge, with the attaining of the maximum service which is being so ear-

nestly sought by all hospital authorities, is the necessity of stopping all so-called leaks. These are not the outcome of what one would designate as uneconomical handling so much as they are the result of some omission or some commission of error in planning which necessitates a dual service for the same end. While the amount of food consumed by a certain number of individuals, whether prepared in one kitchen or in two kitchens, would be the same theoretically, necessarily there must be a greater waste in this double service than there would be in the single. Take this in connection with the facts as stated above, as to the necessity for double crews to do practically the same work, and the double maintenance from coal pile to repairs, and the expense would very quickly mount to a point where it would create a decided deficit. However small such leaks are, whether they are confined to the purchase and waste of raw material, or to the cost of preparation, or to the cost

them have a considerable struggle to make both ends meet. Many hospitals are self-maintaining, but are not able to build up any great amount of surplus for investment to meet contingent expenses. It should be borne in mind, therefore, that for each penny saved, there is practically an endowment of \$7,300 on the one hand, and a perpetual mortgage, if the saving is not made, upon which the interest is being paid in perpetuity on the other. It is quite a simple calculation to ascertain just how far this can be carried, and as a matter of fact there are really no limits to its extent within reason, as between the saving by economical methods and those which are manifestly extravagant.

It is not the object to call particular attention to the evils of any one recommendation by the uninitiated, but merely to show that with the installation of many of these extravagances in the matter of dual service, or even in the extravagances of single service, there is a very decided and un-

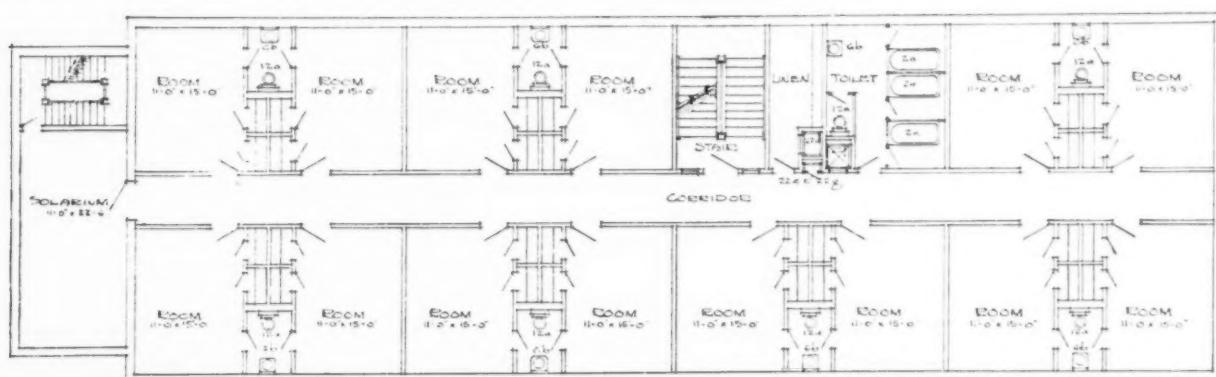


Fig. 3. Second and third floors of the nurses' home. Each bedroom is large enough for two beds.

of handling, they do enhance the cost per patient per day in the conduct of an institution which must be added to the general maintenance charge.

For these reasons, this general maintenance would be increased under the dual kitchen arrangement. Stress is laid upon this one point, inasmuch as there are many like suggestions being made constantly by the neophytes for the erection of nurses' homes. If such well-intentioned persons would only take into consideration the fact that the difference in cost of one cent per patient per day in the maintenance of one hundred patients was the interest at 5 percent on \$7,300, and that this would have to be multiplied by the number of pennies that could be saved by a single system throughout the institution which took into account every item of maintenance, just as it would in any other business, there would be a vastly different procedure on their part in making such suggestions.

Not all hospitals are endowed; in fact, many of

necessary increase in cost of maintenance. In most discussions of nurses' homes, there is found a unanimity of opinion that all such homes must necessarily be built with an attic. The reason for this is not apparent. Buildings can be erected just as sightly and just as artistically, and assuredly at much less cost, without attics than they can with these useless spaces. In almost every instance, these attics are recommended as admirable places for either the storage of trunks, or for dormitories for the night nurses. In some instances it is even suggested that "in addition to these dormitories, of course the night nurses would have their own bedrooms." Why not an artistic and useful adaptation of the roof for outdoor sleeping, with all of the comforts which make this outdoor life so much to be recommended and desired?

It is not within the province of the architect to suggest the conduct of an institution. What he necessarily must do is to facilitate the operation

of the institution by knowing what is the minimum requirement for the maximum result. He need not know how nursing is done in detail, nor need he know the routine followed in admitting or caring for the patients, but he should know what is required for any general or specific purpose for *each and every* service in the institution. So in the nurses' home, he must be cognizant of the results to be obtained, namely, to make the nurses' home efficient so far as lies within his power, in giving to them the comforts and necessities required in such a home.

The problem of providing efficient nurses' homes must be considered not only from the psychological side, but it is most vital to the nursing efficiency that it be considered thoroughly from its practical and social aspect. For some unknown reason the one point that is usually lost sight of in the planning of such a building is the fact that it is a home, that the nurses have to reside in it for three years in most instances, and that, in addition to being their home for a great length of time, it must afford facilities for healthful recreation and social intercourse, and for necessary study for the nurses.

The hospital makes its own rules and regulations concerning the conduct of the nurses, but surely it is within the province of reason so to plan the homes that, in the observance of such rules, no little part of the whole nursing problem is dependent on the mental and moral attitude of the nurses themselves, and, if environment can make for better conditions, then most assuredly it should be given the most serious consideration.

While home conditions so-called should be provided, this is not sufficient. Good, healthful recreation, and, what is most vital, the facilities for the enjoyment of social life, should not be overlooked. It has been said that, when nurses are off duty, they are too tired to indulge in such recreation. Why nurses are differently constituted than the majority of the human race has not been explained by those who advocate this fallacy. The probabilities are that such nurses as have been observed as being too tired have no facilities for changing their entire mental and physical attitude by getting away from their work because the means to do so have not been provided in their homes.

There should always be grounds around a nurses' home sufficient for shady nooks, a tennis court, and plenty of grass and flowers, just as one would like to have about his own home. There should be provided a swimming tank in the basement of the building. This can be done at very

small additional expense, and is most assuredly worth such expenditure. It may be necessary to use to some extent filtration in supplying such tanks with water, but, in the great majority of communities, this is unnecessary. There should also be provided a gymnasium with a fair amount of equipment, but especially arranged so basketball can be played. Either in the gymnasium or in the large living room, there should be provision made for a moving-picture machine, or a lantern-slide machine as the case might be, and most assuredly in the living room and library should be placed plenty of outlet plugs for reading lamps.

The floor in the gymnasium should be of wood so dances can be held in this room. If it is possible to do so, and funds are sufficient, on each floor there should be a small library or lounging room, and if possible a fireplace in this room where the nurses can congregate without the necessity of being continuously in their bedrooms when in the nurses' home and not on leave.

Little need be said about the toilet facilities for the nurses' homes, inasmuch as the ideal condition would be a space, under any circumstances, with seat and lavatory between each two rooms. The providing of tubs would follow ordinary equipment, except when there is a natatorium with its attendant showers, when fewer baths would be required. Above all, there should be plenty of closet room for the nurses' clothes. Where it is necessary to put two nurses in each room, in such cases the rooms should be large enough for this purpose, and each nurse should have her own closet, chiffonier, and small study table. The same rules as apply to the hospital proper for the equipment of such a building, its lighting, heating, and plumbing, would apply to the nurses' home. As a matter of fact, aside from the special features mentioned, there is practically no difference between such buildings of an institution. There should also be provided on each floor a porter's closet, linen room, and storage closet, also a clothes-chute. A small laundry, nicely equipped for the nurses' personal use, should not be overlooked. A dumbwaiter or elevator should be provided to take the laundry from the basement to the respective floors. This obviates the possibility of marring walls and woodwork by the carrying up and down of baskets, which are much too heavy for an ordinary attendant.

What must be borne in mind at all times is the fact that, besides being a place for the nurses to live, it is a home, and that it has in addition all of the requisites for the social side of the nurses' lives.

No plan which could be presented would em-

body all of the requirements of a nurses' home in such a plan. Necessarily, the vital consideration in the planning of such homes, aside from the adequate arrangement for the housing of the nurses and the minimizing of the cost of maintenance, would be in the equipping of such an institution with its permanent mechanical equipment, including the heating, plumbing, and electric work, and all of the accessories which are attached thereto.

However, the plans presented herewith, while a composite, embody in a very simple form practically all of the planned requirements of such an institution. The number of nurses to be housed would determine the size and the number of stories. The basement shows the adequate storage room for trunks, which is very accessible and which does not necessitate the trunks being carried up and downstairs into so-called attic spaces. It shows also the lockers, showers, and dressing rooms in connection with the gymnasium and the natatorium.

The first-floor plan shows the arrangement of the living room and class room at opposite ends of the building, and small so-called guest rooms in which the nurses can entertain their friends without the necessity of taking them into the nurses' living room. A small serving or coat room is shown directly off the class room, which can be used for the serving of light lunches if the class room is used at any time for entertainments.

The second and third floor plans, and any other subsequent floors or extensions to these, show the ordinary arrangement of these with toilets between the bath rooms, and other working departments mentioned above. The rooms shown are all adequately large for two beds. However, if one of these rooms is not set aside on each floor for a quiet room or for the reception of nurses who are indisposed, a special room should be provided for this purpose. In lieu of the ordinary library on the respective floors, there is a solarium shown on each of the floors which is to be used as a floor study or sitting room. If the building is to be made over three stories in height, it should be equipped with an automatic elevator.

It will be exceedingly difficult under existing conditions to give an adequate idea of the cost of such nurses' homes. Primarily, the problem resolves itself into the kind of construction which, in the consideration of the committee, should be adopted. Necessarily such homes should be built fireproof, and it is upon this basis that any and all calculations which can be made are based. The method of calculation on a cubic-foot basis, as well as that upon bed capacity, is manifestly as

inadequate for a solution of the cost of nurses' homes as it would be in any other building, especially a hospital. The facility and accessibility with which labor and material can be attained is largely a determining factor.

Calculations have been made, and articles have appeared in which the actual cost given varies from 35 to 45 cents per cubic foot. Buildings of this character recently completed would indicate that somewhere in the vicinity of 37 to 39 cents per cubic foot for fireproof construction would be a fair estimate, but as stated, this would depend largely upon the elaborateness of the plan, the distance from and the facility in obtaining the commodities and labor required for the construction. Before considering the matter of existing costs in relation to existing conditions, the subject of cost-per-bed calculations will be disposed of by merely stating that such calculations for nurses' homes are as absolutely inadequate in every particular as they customarily are in considering the cost of hotels or hospitals.

At the present writing there seems to be locally, in most communities in the United States, sufficient building material and sufficient labor, much of the latter idle, for the construction of nurses' homes and hospital buildings, and it might be stated further that many contractors, and, assuredly, material men and labor, would be in much better position to erect buildings of this character at the present time than they will be at any time in the future for at least a decade.

In making a plea for efficiency for the designing of nurses' homes, a plea might be added also at the present time that if nurses' homes are required and necessary to the conduct of an institution, they had better be erected now, just as hospital buildings so required had better be erected now, than to wait for a readjustment of prices of labor and material in the future. Owing to the fact that we are now the possessors of practically the greater tangible world's wealth, there will undoubtedly be an expansion in money values, and this combined with the fact that immediately following the war there will be not only an enormous reconstruction period abroad for many years, but in this country at the present time there are practically being built no homes, no apartment buildings, no industrial plants not directly connected with war industries, and no other class of buildings of any character not erected for war purposes, it means that there will be a dearth of such buildings immediately following the war, and a consequent rush for labor and material necessary to fill the demand for them.

The problem itself is an economic one, and it is perfectly patent that the most propitious time to build, so far as the cost of buildings is concerned, is when building operations are at a minimum. If the means are at hand for building at the present time, and the necessity exists for such building, then most assuredly this is the time to build, not only from an economical but from a patriotic standpoint.

The entire subject of the erection of nurses' homes, therefore, resolves itself into one of efficiency in their design. If they are efficiently designed, they must typify and embody all of those essentials which make for home environment, combined with a nice adjustment for their economical construction to the end that they may be maintained at a minimum cost consistent with their highest purpose.

THE INSTALLATION OF A MODERN ROENTGEN EQUIPMENT AT A MODERATE EXPENSE

Equipment Capable of Doing the Highest Grade of Work Installed for Less Than Twenty-Five Hundred Dollars—Selection of Transformer—Fluoroscopic Equipment Improvised—Home-Made X-Ray Table

By V. M. MOORE, M.D., ROENTGENOLOGIST, ST. MARY'S HOSPITAL, GRAND RAPIDS, MICH.

IT is no longer a debatable question that every institution claiming to be a hospital for the diagnosis and treatment of the sick or injured should have an x-ray equipment which is adequate for its needs. Many hospitals already have this most important diagnostic and therapeutic aid, while there are others which, while recognizing the pressing need of such an equipment, have been unable to avail themselves of it on account of the financial problem involved. It is with the hope that our experience in this regard will be of some help to other hospitals that the following article is written.

Our problem in a nutshell was this: We needed a complete x-ray equipment for our hospital, but we were not able to spend \$5,000 for it. It was decided that if an x-ray department were installed all apparatus purchased must be such that the highest class of work could be turned out. Furthermore, it must be able to care for every kind of work that might properly come to an up-to-date x-ray laboratory—in short, the best must be had and at a price within reach of our means. How was this to be done?

The first item to be decided upon was that of a transformer. It was thought best to buy the very best machine regardless of price. The reason for this is apparent to anyone engaged in this kind of work, for this is the power plant and it must be able to deliver the right quality and quantity of electricity to the x-ray tube, else, no matter how excellent the remainder of the equipment, the work will fail in the emergency. The machine selected was built for an alternating current of 220 volts and would draw 100 amperes through the primary winding. This necessitated the use of a No. 4 copper wire in the power line leading to it. To make doubly sure that the line would not drop

in voltage, a No. 2 wire was used instead, which allowed sufficient surplus of copper. Care was here taken that it should not be connected with the same line as the hospital elevator, because the latter might cause a drop in voltage. A word of caution might be inserted here, and that is to be sure and get estimates from several electrical houses before letting the contract for the installation of the power line; otherwise the cost of such work might come as an unpleasant surprise. Furthermore, insist on a larger wire than the electrician thinks necessary, because most electrical men do not understand the necessity for a sustained voltage.

The next important item to consider was that of equipment to do proper fluoroscopic work. Our ideal here could not be attained because such an equipment would cost in the neighborhood of \$1,400. Here we began to improvise, bearing in mind, however, that the quality of work should not be sacrificed. We were able to buy a slightly used vertical roentgenoscope without the fluoroscopic screen. This we purchased for \$200. A new tube stand was then considered, and the best one found was purchased. The x-ray tube question then came up. Should we purchase gas tubes at \$35 apiece or should we spend \$125 for a Coolidge tube? It was decided to buy the latter, because of its greater durability and accuracy in technical work. Just a word here in regard to this new type of tube. All x-ray tubes previous to the discovery of this tube depended upon the presence of a partial vacuum, and the quality of the rays generated with a given voltage was dependent upon the degree of the vacuum in the tube. Unfortunately, as the tube became hot during use, the vacuum in the tube would vary, thereby giving a different quality of rays which

became more or less penetrating according to conditions prevailing at the time. This made it very difficult to follow a standard technic, and the occasional beautiful plate did not compensate for the many other mediocre ones. With the advent of the Coolidge tube a new principle was evolved. In this tube a nearly perfect vacuum was produced—so great, in fact, that no current would pass through it unless heat were generated within the tube. This was accomplished by means of a lighting filament on the cathode and generated by a storage battery or other suitable means. With this tube a given voltage will always give the same quality of rays provided the same amount of heat is generated inside the tube. For this reason it is comparatively easy to duplicate the results of successful work if a record is kept of the different factors concerned. For these rea-

made of veneer and covered with lead of suitable thickness. This box was set on rollers which moved on a track crosswise of the table. This track rested on a platform, which in turn moved longitudinally on another track, and by this means the tube could be placed in any position under the table. The tube-holder from the vertical roentgenoscope was utilized and was suspended from the roof of the box. A shutter was made which was in the shape of a round-headed paddle with a hole about 3 inches in diameter. This was covered with lead, and the end of the handle fastened to the box. By means of a wire which projected to one side, the shutter could be thrown in or out of place. This afforded two different-sized openings and it proved to be very satisfactory. The tube was connected with the overhead system by means of special insulators

made expressly for the purpose. These projected from one end of the box, and to these wires could be attached from trolley reels mounted upon a cross arm, which is seen in the foreground of the picture. The overhead wires could then be dropped to these trolley reels and complete the connection. While it is realized that exposed wires such as this are somewhat dangerous, by using a little precaution this danger can be avoided. A tunnel plate-holder was set in the top of the table and was used during fluoroscopy or as a holder of stereoscopic plates. The table was put together entirely by



Room for x-ray work, containing an equipment costing \$2,346.55. Note the home-made table for a horizontal fluoroscope and also for use as a table for the usual radiographic work.

sons it was thought best to install the Coolidge tube with the necessary controls. A stereoscope and a developing tank constituted the remainder of the large items of expense.

We have refrained from mentioning the question of a table because it is here that we have effected a modest saving. I conceived the idea of constructing a table which would serve as a horizontal fluoroscope and also as a table for the usual radiographic work. After studying the principles involved in tables on the market it required no great amount of ingenuity to draw up plans and to construct one that would be satisfactory. The table was made entirely from wood with the exception that several items were purchased from companies making x-ray equipment. The illustration should be sufficient to show the simple principles involved. The tube box was

screws and finished with drop black and non-metallic shellac. This finish successfully insulates the patient, even though the wires underneath come in contact with the legs of the table. I constructed this table at odd times, and, this being my first attempt at carpenter work, it would seem that anyone with a knack for mechanics could construct one equally efficient. The imperfections of such a table are obvious to one familiar with this kind of work; however, it served its purpose and is earning money with which to purchase a combination roentgen table.

The alterations which were necessary in the rooms would not be of general interest and entailed no great amount of expense. Overhead steam pipes had to be removed, electrical wiring installed, the door between the transformer room and the radiographic room leaded and a lead-

glass window inserted, and numerous other small details carried out which need not be mentioned. An overhead switch was made by a carpenter to connect the vertical fluoroscope which stands at the other end of this room. The stereoscope was placed on the shelf of a cupboard on the right. This cupboard was already built in and serves many other purposes. The total expense of the installation was \$2,346.55. This amount includes every cost, and the following things are included:

1 No. 1151 Universal transformer.....	\$1,000.00
1 Rheostat for Coolidge tube.....	25.00
1 Storage battery for Coolidge tube.....	28.50
1 No. 3 stand.....	215.00
1 Fine focus Coolidge tube.....	125.00

1 Medium focus Coolidge tube.....	\$ 125.00
1 Broad focus Coolidge tube.....	125.00
1 Coolidge ammeter.....	20.00
1 Insulated shelf.....	3.50
1 11 by 14 intensifying screen and cassette.....	47.00
1 Cathode terminal.....	1.25
1 Complete cylinder.....	13.00
2 Trolley reels.....	8.50
1 Pair lead rubber gloves.....	7.80
1 Lead rubber apron.....	12.00
1 Plate-holder	15.00
1 Plate-marker	5.75
Wiring service for x-ray outfit.....	95.00
Official inspection fee.....	3.50
Vertical roentgenoscope.....	225.00
Stereoscope complete.....	98.50
Developing tank.....	55.00
110 V. A. A. 60 cycle teleflasher.....	102.25

THE OPEN COTTAGES AT KANKAKEE STATE HOSPITAL

Individual Study Necessary in Treatment of the Insane—Liberty of the Grounds Seldom Abused by Patients—Selected Groups of Trustworthy Patients Permitted to Live in Open Cottages Without Nurses

BY EUGENE COHN, M.D., MEDICAL SUPERINTENDENT, KANKAKEE STATE HOSPITAL, KANKAKEE, ILL.

IT seems to me that in no class of human afflictions is a sympathetic understanding of patients' feelings more essential than in those cases suffering from mental disorder. In a general way, the insane possess all the emotions, feelings, likes and dislikes possessed by the average sane. The old way of treating the insane in purely custodial fashion for the purpose of housing them, while protecting them and society as well, is from the modern viewpoint quite insufficient, unscientific, and inconsistent with the purpose in mind, namely, the relief and treatment of mental distress or mental disorder. In the care of insane patients the same great principle that should be employed in the care of any other types of patients must be borne in mind, namely, the study of the individual. When studying individuals, the careful and experienced physician will soon learn the safe extent of liberal and humanitarian treatment to which each patient is properly entitled. Granting that a given percentage are not entitled to certain liberties, we find that a large percentage can be so trusted and with comparative safety to themselves and society.

And so this institution has more than 50 percent, or about sixteen hundred, of its patients enjoying the liberty of the grounds without being guarded by either attendants or nurses. Such patients are permitted to go out by themselves in single paroles or, in more instances, in so-called walking party paroles, meaning thereby that from three to five patients go out in groups, each one responsible for the group and the group being held respon-

sible for the one, all stating upon their honor, before being given this privilege, that they will not take advantage of the liberty granted. The many benefits thus derived by the patient are obvious. Escapes are very few.

Finally, it was deemed wise and safe so to group and classify the patients as to place in certain cottages only such as after proper study were considered entirely trustworthy. In this manner it was found possible to have in this institution seven open cottages in which the patients live like a large family, each cottage having a housefather or housemother, who is also a patient. This patient is on duty eight hours a day and is relieved by another patient at stated hours. These housefathers and housemothers, whom we call auxiliary patients, are not given disciplinary rights or privileges, but simply look after the wants or details of the wards, acting as a go-between for the general nurse or doctor in charge. One nurse at certain intervals makes the rounds on all these cottages in order to supervise the care of the patients, but especially to check up the supplies and material needs. The patients on all these wards are of such type that no trouble or disturbance is expected.

I have made use of this system now for over six months and have not had a single instance of disturbance. These wards are among the happiest and best regulated in our institution. The patients, realizing that they are being trusted and depended upon, are seemingly anxious to prove worthy of the confidence placed in them. Any sud-

den case of illness or necessity is immediately reported by the auxiliary patient to the nurse or doctor. The condition of the cottages as to cleanliness is immaculate, and the general order and contentment of the patients are all that can be hoped for in an institution of this kind. They appear like a large contented and well-regulated family and are doing better than under any other system with which I have become acquainted in my twelve or more years of experience in hospital work among the insane.

Incidentally, the economic side of this system must be borne in mind, especially now when everything costs much and it is very difficult to obtain help on account of war conditions. These seven cottages, which under ordinary conditions would have a personnel of, say, 20 to 22 attendants or nurses, are now having a personnel of but 2. This institution has quite a number of open cottages besides the seven mentioned, but these particular seven are without regular attendants or nurses, excepting as stated previously.

The secret of our success gained in the following out of this system depends, firstly, upon the proper classification and careful study of the patients placed in these cottages; secondly, upon the realization on the part of the management that the insane are essentially human, and that many of them have a well developed sense of honor and are able to realize their obligations towards those who place confidence in them.

While it necessitates, perhaps, a somewhat intense moral conviction and determination on the part of the management to evolve a system considerably at variance with the accepted theories of the past, it seems justifiable in the light of modern thought to follow out the plans which prove most efficacious for the care of our unfortunate charges according to our individual institutional convictions and experiences. Even though some unforeseen unfortunate incident or accident, such as is bound to be met with occasionally in hospitals of this kind, should happen in connection with any one of these cottages (which, however, has not as yet occurred, and is not expected to occur) the comforts and benefits accruing to great numbers of these patients, through the proper carrying out of this system, should be well considered in justification and defense of such criticism as might thereby be incurred.

This institution also utilizes auxiliary patients, especially selected, in many of its other departments. For instance, a certain number of men and women are selected as patrol auxiliaries. They spend given hours of the day about the grounds and are detailed to see that other patients less reliable than they do not wander away or get

into mischief. Other auxiliary patients are in charge of details doing outside work; still other male patients assist female employes on male wards in the general conduct of the wards. I could continue in this way in a much more lengthy account, but I believe that at all times, and especially during these days of stress and difficulty, patients can be used to assist in practically every department of the institution, provided proper judgment is employed on the part of the management.

I wish to emphasize again that in no instance is any patient given disciplinary authority. The patient is always held responsible to some employee or officer, and is never permitted to use any tactics that could be construed as unkind or in any way undesirable.

Drying Versus Canning as a Source of the Winter's Vegetable Supply

A California hop-grower, Mr. E. Clemens Horst, who since the outbreak of war has devoted his extensive acreage to the growing of vegetables and his drying plants to the dehydration of these crops, furnishes us with comments on the advantages of drying over canning which should be of interest to hospitals which put up any considerable proportion of the winter's supply of vegetables and fruit. He says:

"When dried, the vegetables are not heavy and they can be compressed into blocks without injury to their texture or quality. Accordingly, a large quantity can be stored, occupying but a fraction of the space needed for fresh or canned varieties. It is not necessary to use expensive tin or wooden containers for the dried vegetables, as paper cartons will do. As vegetables contain from 80 to 95 percent of water, the drying of them reduces the weight and bulk from 20 to 1 in the case of tomatoes to 6 to 1 in the case of potatoes.

"As there is no patented process involved in the drying of vegetables, anybody with proper equipment could do it, and community dryers can be established in different localities to evaporate the product from that section. The cost of dried vegetables, therefore, should not be high, and the consumer would be able to have at all seasons of the year the necessary vegetables to supply the mineral salts required by his body.

"Another saving which would follow the dehydrating of large quantities of vegetables at a central drying plant would be the utilization of the tops of the vegetables, now thrown away, and the culls, peelings, etc., resulting from the preparation of the articles for drying. The green tops could be fed to stock or pigs, and valuable by-products, such as cream of tartar, could be made from potato peelings."

Many hospitals, especially those which grow their own vegetables and fruit, would perhaps find drying a suitable method of saving this surplus for winter use.

Thirty representative citizens of Falls City, Neb., held a banquet last month, at which they discussed and formulated plans for a campaign to interest the citizens of the community in the establishment of a hospital. Mr. A. G. Shubert is president of the board of directors.

A thankful heart is not only the greatest virtue, but the parent of all other virtues.—Cicero.

NEW MATERNITY BUILDING FOR WEST PHILADELPHIA

West Philadelphia Hospital for Women Adds Special Pavilion for Maternity Patients—Some of the Details of Construction—Exclusively in Charge of Women

BY LADY W. BURROWS, MEMBER OF THE BOARD OF DIRECTORS, WEST PHILADELPHIA HOSPITAL FOR WOMEN, PHILADELPHIA.

IN April, 1917, there was opened at Forty-First and Parrish streets, Philadelphia, the Elizabeth L. Peck Maternity Building of the West Philadelphia Hospital for Women. This is a handsome structure of three stories, 93 feet long by 47 feet in width. It faces to the south, with a broad, open lawn extending from its doors. It is on high ground, in a residence section of the city where there is plenty of open space, free circulation of air, relief from the sounds of heavy traffic, and an absence of odors and other unpleasant features commonly associated with closely built-up neighborhoods of almost every large city.

The building cost, in round figures, \$100,000. It is part of the West Philadelphia Hospital for Women, and its affairs are conducted by the same board of managers. Its superintendent is a woman, as is its supervisor of nurses. The nurses are women. The resident physician is a woman. All members of the board of managers are women, as are the members of the medical staff. The only men who have any part, in any way, in the conduct of the building are the janitors.

The Elizabeth L. Peck Building has the distinction of being the first structure in Philadelphia planned, erected, and equipped with a single eye to its use exclusively for maternity cases, except a building of the Woman's College Hospital at Twenty-First street and North College avenue, erected some years ago. The history of hospital development in the last quarter of a century has shown a growing recognition of the increasing need of special arrangements for the care of maternity patients in public or semipublic institutions. The state of Pennsylvania, by legislative enactment and by recommendation from its medical authorities, has placed special emphasis upon this class of medical service by hospitals which seek state assistance.

It may be said, however, that the West Philadelphia Hospital for Women was a pioneer in this field of activity. The care of maternity patients was included in the inception of the hospital by its founders, and it has been a foremost consideration at all times in the more than twenty-eight years the institution has been in existence.

Local conditions have had much to do with the development of the hospital's maternity service; in a sense, the new maternity building may be regarded as the logical outcome of these conditions.

The first annual report of the hospital relates that when five women physicians met in the office of Dr. Comly Howell, in May, 1889, the necessity of founding a hospital for women was "forced upon them by the ever-extending limits of the city." There was no institution where women could be treated by women physicians nearer to West Philadelphia than the Woman's College Hospital. This was and is now east of the Schuylkill River, a distance ranging to as high as five miles from some parts of West Philadelphia. In many instances it was so far away that poor persons could not avail themselves of its services.

In 1890 West Philadelphia had a population of 99,182. At the present time it has a population of 247,928, or 16 percent of the city's total, scattered over a territory of 21.284 square miles, approximately one-sixth of the area of the city.

Under any circumstances, a hospital conducted by women for the treatment of women inevitably would have devoted a large amount of care to maternity cases, but the growth of the population of West Philadelphia has been an impelling consideration. In the first six months the hospital was in operation there was only one birth in the hospital. By 1896, however, it had become necessary to make special arrangements for maternity cases, and a separate building was rented at 4046 Ogden Street, adjoining the hospital, which had accommodations for five ward patients and two private patients.

In 1897, the first full year the ward was in operation, there were twenty-one births here. This number increased until, in 1902, another building was combined with the first, and the accommodations increased to take care simultaneously of ward patients up to the number of eight, besides seven patients in private rooms. The following table of the number of births annually shows how the maternity work of the hospital has increased in importance and value since then:

Year	No. of births	Year	No. of births
1903.....	66	1911.....	171
1904.....	62	1912.....	208
1905.....	78	1913.....	228
1906.....	81	1914.....	300
1907.....	115	1915.....	309
1908.....	143	1916.....	315
1909.....	115		

It can be seen from the mounting figures of the last few years how necessary an increase in facilities for maternity cases was becoming. The new

maternity building was erected almost entirely from private subscriptions. It is named for Dr. Elizabeth L. Peck, who was one of the founders of the hospital and its first physician-in-charge, and who now is senior member of the staff.

The building itself is as nearly fireproof as modern construction can make it. The outer walls are constructed of brick, the partitions of hollow tile, the finished floors of the wards of cement (treated to prevent the raising of dust), and the floors of the corridors and utility rooms of white terrazzo. The sills of the windows, the coved surbases at the junction of all walls with the

where, in favorable weather, patients can sit or be wheeled in chairs. On the first floor is the main ward, a large pleasant compartment with twelve beds and accommodation for a few more in case of emergency. There is also a small office and a reception room.

There are two delivery rooms, one on the first floor and one on the third. The former is unique in that it forms a part of the "delivery suite" of five rooms, all of which can be reached, one from the other, without entrance upon the main corridor. The first room in this suite is the delivery room itself, which is equipped down to the small-



Fig. 1. The new Elizabeth L. Peck Maternity Building of the West Philadelphia Hospital for Women, designed by Walter Smedley. The type of architecture is plain Georgian, and the material is old English red brick laid in Flemish bond with trimmings of Indiana limestone.

floors, the thresholds of doors, the side walls of baths and toilets, and the stairs are of white marble. The doors throughout, with their trim, are of plain hollow steel, all the angles being rounded. The vertical angles of all walls and their junctions with ceilings and floors are finished with sanitary coves.

The two stairways are broad and of easy angle, one of them being enclosed with brick walls and connected through open balconies to the different floors in conformity with what is known as the "Philadelphia type" of enclosed smoke-proof stairway.

Every room in which patients are kept opens to the south. Those on the first and second floors open through double doors on to large porches

est detail. The second is the sterilizing room. In this there is a commodious supply closet, comprehensively equipped. Adjoining is the labor room, where ward patients are taken when the hour of delivery approaches, and kept in seclusion until they are wheeled into the delivery room itself. It is a hospital practice to note the exact hour and minute of every birth.

From these rooms, a little hallway leads, still without touching upon the main corridor, to dressing and wash rooms for men and women physicians, each of which is equipped with a shower bath and lockers. Another room on this floor, although not of the suite, is the nurses' utility room, where are kept bandages, antiseptics, and other articles necessary in maternity cases, an appa-

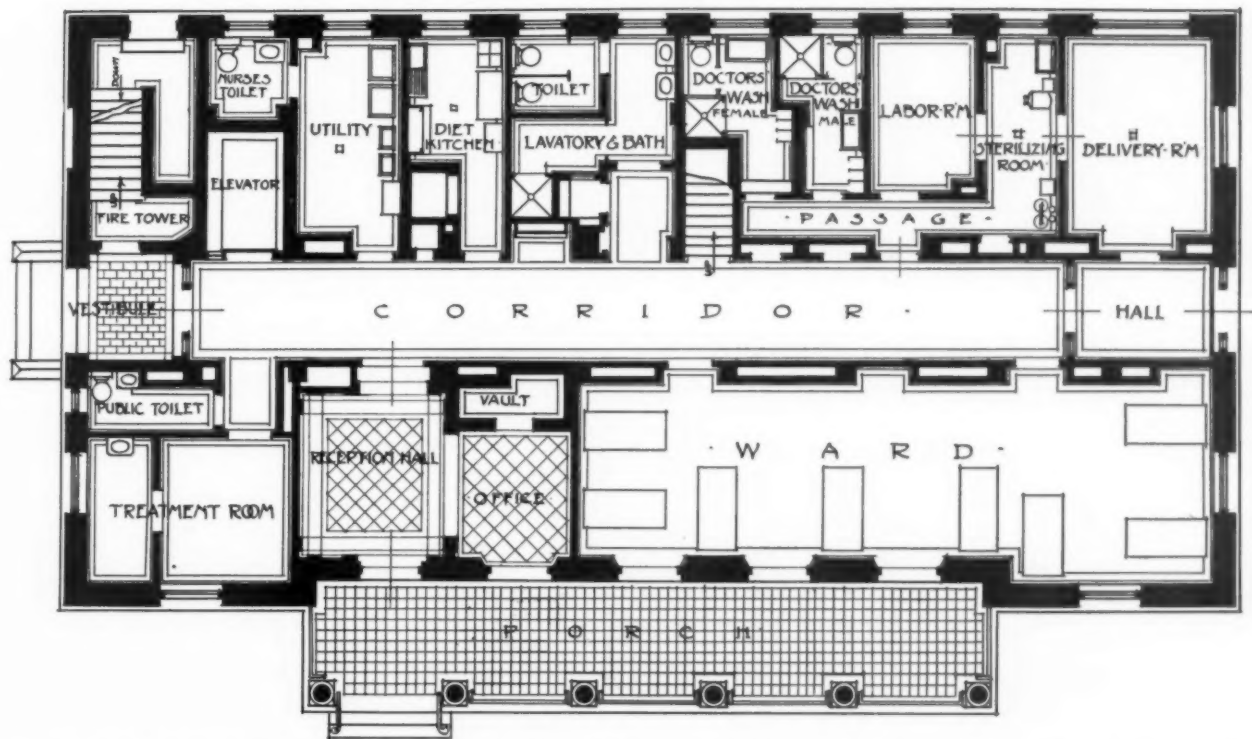


Fig. 2. The first floor of the maternity building of the West Philadelphia Hospital for Women. Note the arrangement of the delivery suite in the northeast corner, every room in which can be reached without passing through the main corridor.

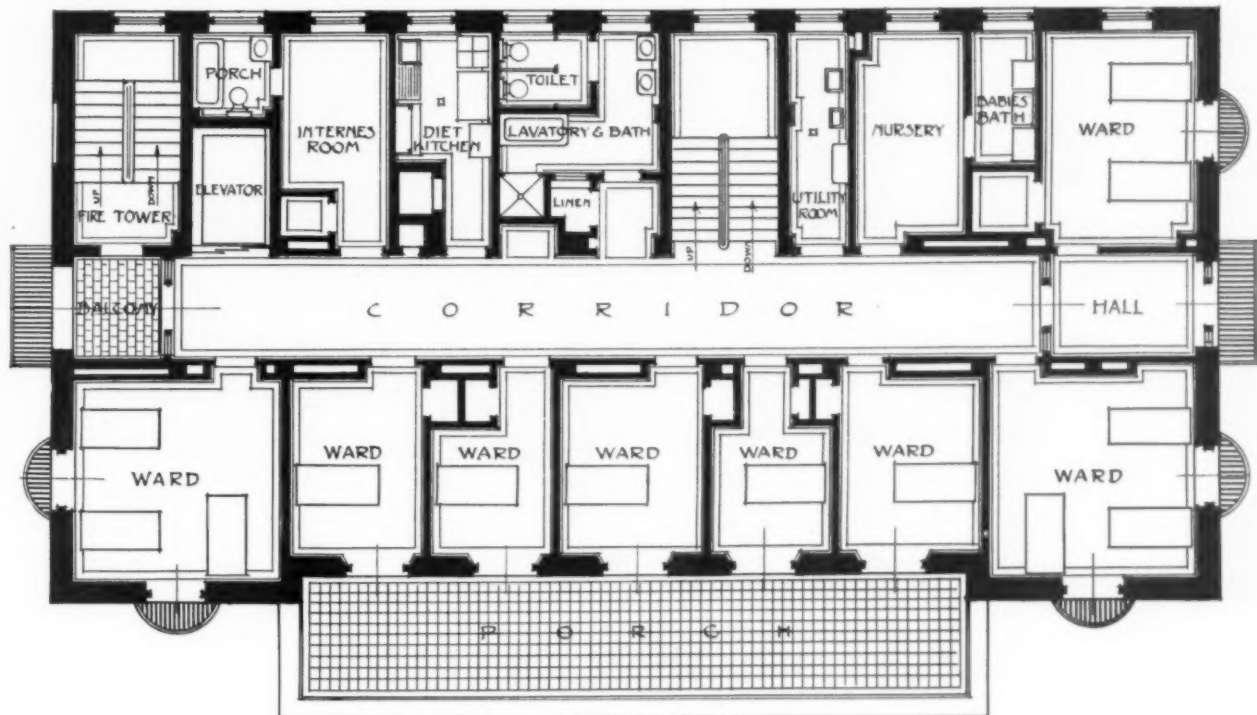


Fig. 3. The second floor of the maternity building, with two four-bed wards and six private rooms.

tus for the warming of utensils, and an incinerating oven. In each delivery room and in the rooms used for sterilizing purposes, drains are placed in the center of the floors.

There are two wards of four beds each, and six private rooms on the second floor. On each floor is a baby room in which each child has its marked crib, where it lies except at nursing time.

Each floor has its own linen closet, and each its own linen. Each floor, moreover, has its own kitchen for patients on special diet. Meals for those on full diet are brought from the kitchen of the main hospital, and arrangements are made for such prompt delivery as to obviate the necessity for a second warming. An electric signal system, with red bulbs outside each door, has been

installed for the use of patients instead of the electric bell system used in the old maternity building. Each floor has a bathroom. On every floor is a waiting room for visiting friends and relatives of the patients.

The building was designed by Walter Smedley, architect, of Philadelphia. It is so constructed as to admit of an additional story. A basement extends beneath the entire area of the building, in which are the electric and plumbing mains and the heating and ventilating system. The basement is connected by an underground tunnel with the boiler house and other buildings of the hospital group.

The elevator is of electric type, with automatic electric control for each floor, and with safety devices to prevent the doors being opened except

tire charge of supplies, sterilization, and apparatus, and the training of nurses in room technic. This supervisor is present at all deliveries. There are six undergraduate nurses—seniors and juniors—in the building. One senior nurse is present in the delivery room at all births. A graduate nurse is in charge of each floor. Patients of men physicians are taken in the private and semiprivate rooms, but not in the general ward.

In the report of that first meeting back in 1889 occurs the following sentence: "One great object of this hospital is to help the hard-working, deserving poor, not to foster pauperism." This has been a guiding principle throughout the history of the institution. A charge of \$2 a day is made for all patients in the general ward who are financially able to pay it. Where the patient is too

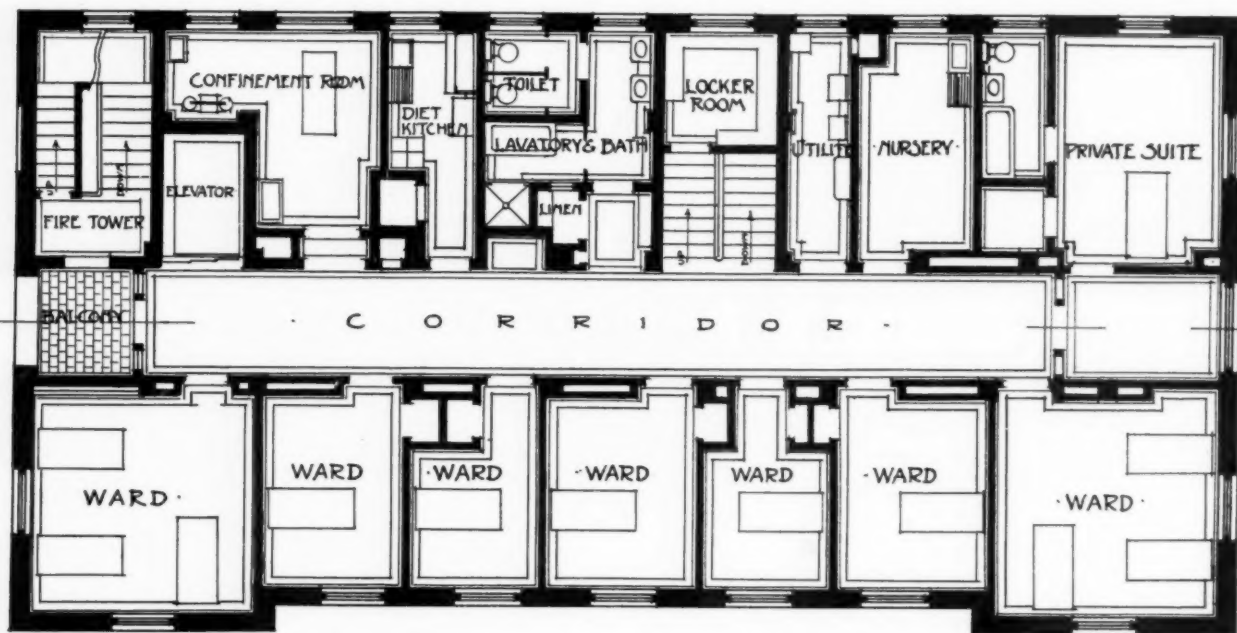


Fig. 4. The third floor of the maternity building, with seven wards, one private suite and a confinement room. Each floor has its own waiting room for friends of patients, its own nursery, diet kitchen, linen room, bathroom, etc.

from inside the car and when it is standing level with the floor. The heating coils are in the basement. Through them fresh, warmed air, under thermostatic control, is forced to the different apartments throughout the building. Each room is separately ventilated. The apparatus is so arranged that in summer an ample supply of fresh air can be delivered to all the apartments.

The exterior of the building has been treated in a plain, substantial manner, following the Georgian type of architecture. The wall facings are of old English red brick, laid in Flemish bond, with trimmings of Indiana limestone.

The administrative end of the work is in charge of a resident physician who lives in the building, a superintendent, and a supervisor of nurses. The superintendent is Miss Elizabeth Watson. There is a supervisor of the delivery rooms, who has en-

poor, special cognizance is taken of the fact, and many are cared for who pay little or nothing. The charge for private patients ranges upward from \$4 a day. Patients in semiprivate wards pay \$2.50 a day. The actual cost of a patient to the hospital is upwards of \$2.25 a day.

One departure in which the West Philadelphia Hospital for Women has gone farther, perhaps, than any other hospital in Philadelphia, is the prenatal clinic. This is attended by women who soon are to become ward patients. Their condition is carefully noted and any untoward circumstances corrected. The hospital also employs a social service "follow-up" system to ascertain whether proper care is given to infant children in poor families. Maternity patients are in the hospital about two weeks on an average.

The average number of patients since the new

building was opened has been above forty, and the average birth rate has been fifty-nine a month. In this time there has been only one death. This

was from a complete placenta previa—in a case in which proper care had been absent before birth.

LITTLE JOURNEYS TO PLACES AND PEOPLE WORTH KNOWING

The First Little Journey—To Jackson, Mich., a Little City That Is Doing Big Things—A Commission Government Which Makes the Public Health Its Civic Responsibility—The W. A. Foote Memorial Hospital a Community Center

By MARGARET J. ROBINSON, R.N., FIELD EDITOR OF THE MODERN HOSPITAL.

EDITORIAL INTRODUCTION

AFTER the fashion of those who have made other little journeys, our field editor is going to try to draw pictures of some of the places she sees, not trying to be very technical, not bothering you with many statistics, but hoping to bring to you some of the vision of the work done within the hospital walls and around them and the people who are doing that work.

She hopes to prove to you that a hospital is not such a dull place after all; that it has its dramatic values, its daily comedies and tragedies, and that here big characters are made and little ones are strengthened—"Its mills grind slowly, but they grind exceeding fine."—EDITORS OF THE MODERN HOSPITAL.

THE LITTLE JOURNEYS BEGIN

It had come to the knowledge of THE MODERN HOSPITAL that up in Michigan was a city which through its board of health and its hospitals, and their executive, the director of the department of public health, was doing things that no other city, at least of its size, was doing in quite the same way or to the same extent, and it was thought worth while for some one of us to go to Jackson to see these things and then to tell you about them if they proved to be of a character that would be interesting to our readers.

Arriving in Jackson one morning, I made an appointment with Dr. Christopher G. Parnall;¹ the

director of the department of public health, and went out to the W. A. Foote Memorial Hospital, the City Hospital of Jackson. The hospital building is on the top of a hill with big trees all around it, and there couldn't have been found a prettier place to put a hospital if it had been picked out as ideal from somewhere else on the map, bought and set down just where it is.

Just as I entered the hospital, a tall American workman, with his arm in a sling, came in. He didn't seem to know just where to go, or how to begin; so the pretty girl at the desk

behind the barred window in the office got up from her seat, came around and out of the office into the hall, and inquired, "Isn't there something I can do for you?" and then she listened to the story of the swollen hand and said she was sorry and arranged for him to see the doctor. I thought then and there how pleasant it would seem to a sick man or woman, or any casual visitor coming to a hospital, to be greeted by a pretty girl who asked you so courteously what she could do for you. It would be pleasant and good business, too.

Dr. Parnall and Mrs. Moore, the superintendent, received me in the inner office, and Dr. Parnall began by saying, "What do you want me to tell you?"

"Anything and everything," I said, "and, if you are willing, let me spend the best part of the next two days here and with your workers outside. Let me go around and see things and talk to people and then I am going away to tell everybody about you and what you are doing here."



Fig. 1. The W. A. Foote Memorial Hospital at Jackson, Mich.

¹Since this article was written, Dr. Parnall has been elected to fill the vacancy left by the resignation of Dr. Reuben Peterson as superintendent of the University Hospital at Ann Arbor, Mich. Major Peterson is now giving his entire time to military service. Dr. Parnall will take up his new duties at Ann Arbor on July 1.

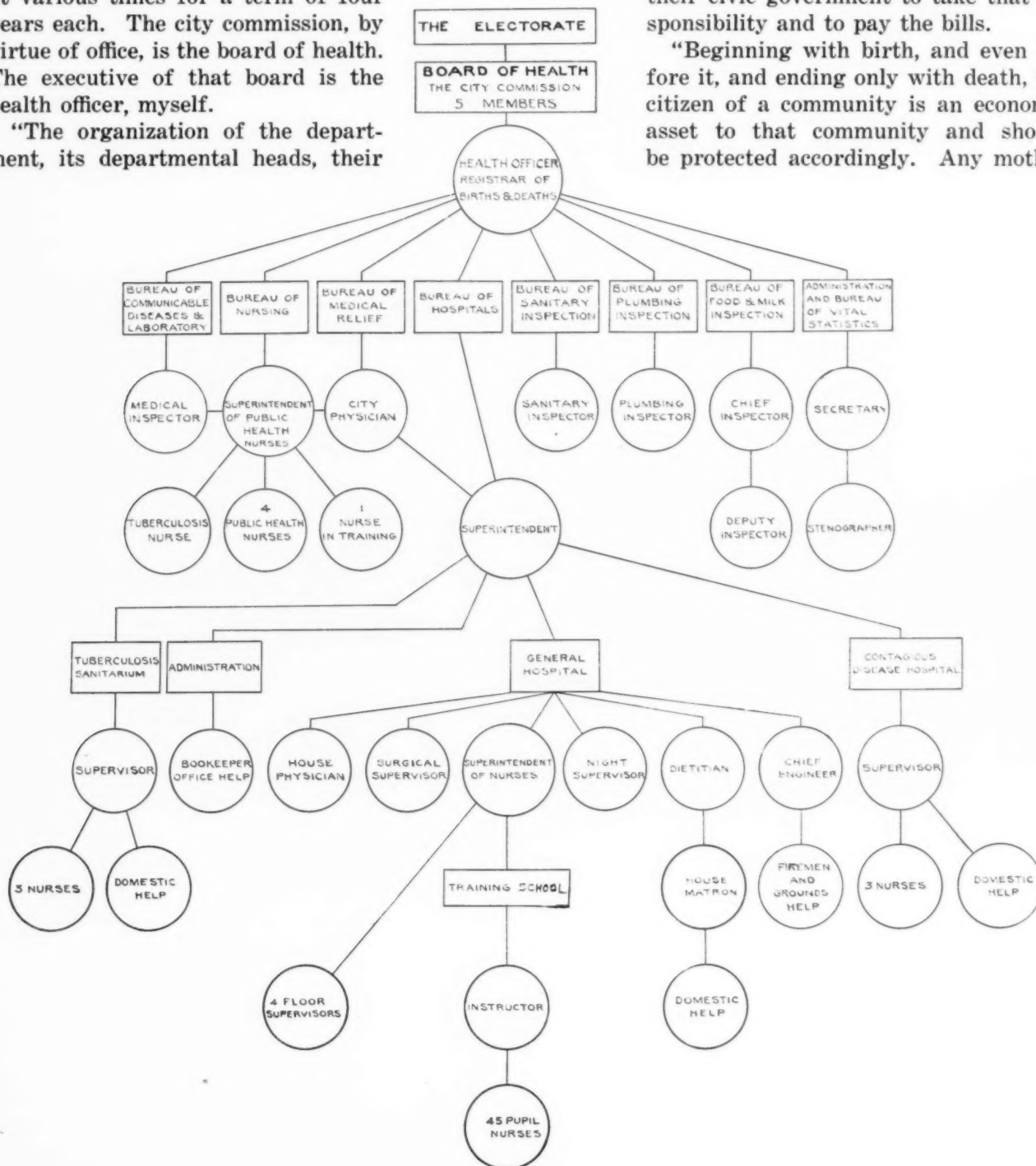
Dr. Parnall began, "Well, the first thing here is the organization, and it is that organization that makes our work possible. The city of Jackson has a commission government of a centralized responsibility. There are five commissioners, the mayor and four others, elected by the people at various times for a term of four years each. The city commission, by virtue of office, is the board of health. The executive of that board is the health officer, myself.

"The organization of the department, its departmental heads, their

pitals, dispensaries, and other public health welfare agencies as it is being done in other places?"

"We believe," he replied, "that central organization is the only sure way to carry out health protection and conservation, and that it is the duty of the people and the taxpayers through their civic government to take that responsibility and to pay the bills.

"Beginning with birth, and even before it, and ending only with death, the citizen of a community is an economic asset to that community and should be protected accordingly. Any mother



work and responsibilities will best be explained by the following diagram:

"Dr. Parnall," I asked, "with a centralized organization, what do you feel that your city and your board of health really accomplish for your citizens that cannot be done as well by the hos-

here in Jackson may receive instruction in prenatal care; her baby, whether she can afford it or not, may come into the world under the best hospital conditions. Through the infant welfare work of the public health physicians and nurses this same child may be protected from the dangers of

malnutrition and the communicable diseases of childhood, and when he comes to school age, through the cooperation of the school physicians and nurses with the public health physicians and nurses, this protection continues and he is given education in his own health protection as part of his school curriculum.

"In our hospitals and dispensaries we have a salaried clinical staff of men who have specialized and who have been thoroughly trained for their own line of work, and then after that we have skilled care to support the diagnosis and advice of these men and to follow it intelligently to some conclusion. This health protection is special and departmental. We begin with vital statistics and sanitary inspection of food, milk, plumbing, etc.,

cannot afford to pay fees for such special work may have tonsils and adenoids removed at the hospital. Policemen, firemen, and other city employees are given thorough physical examination.

"The obstetrical service is especially interesting for the work it is doing. A mother with the largest income in the city may come here and get perfect service for herself and new baby for a rate of \$2.75 to \$5.75 a day. The self-respecting workman on small wages may have his wife taken care of just as well for about \$8 a week. The ones who cannot pay at all get the same service for nothing and without question or investigation, not as a charity but because the city takes it as a responsibility to look after its new citizens and thinks it good economy to do it; and, by the way,

the public health nurses call on every new baby that comes to town, in the hospital or out of it, rich or poor, and keep track of it too afterwards till it comes to school age.

"The heads of our hospital and dispensary department, our public health nurses, school physicians and nurses, and Associated Charities all work together in prevention, care and follow-up work. The department heads lecture to our training school and to the public health nurses."

I asked Dr. Parnall how the Associated Charities joined with the Bureau of Public Health, and his answer was this:

"The city poor department is administered by the Associated Charities and the relief work done through them at the expense of the city. All applications for relief are in charge of a trained social worker, a graduate of the School of Civics and Philanthropy. Cases in need of medical or nursing care are referred to the superintendent of public health nurses."

"Tell me, Dr. Parnall, is not your plan of work here reaching to the ideal plan laid out by Dr. Cabot at the Massachusetts General in Boston, and are you not in a way trying to give the ideal service he pleads for in his 'Social Service and the Art of Healing'?"

"Yes," he said, "and I think it not unreasonable to promise that before long we shall be able to do it. We have the foundation, the city which believes in the public welfare and will pay for it, the



Fig. 2. The office of the city health officer, Dr. Christopher G. Parnall.

and, by the way, we even plan to have our own public abattoir. Then, coming to the hospitals and dispensary service, our hospitals include this one, which is the main city hospital and its dispensary, the tuberculosis hospital and dispensary, and the contagious disease hospital, which at present is in our old city hospital. Provision is made here in special wards for the quarantine of venereal diseases.

"We have a salaried staff including a surgeon and city physician, a pediatrician, a bacteriologist, an anesthetist, and a specialist on diseases of the chest and another on communicable diseases, which include venereal diseases. Through the state we have mental clinics, and, through the cooperation of our school physicians and nurses with the throat specialists, children whose parents

hospitals, the equipment, and the permanently employed salaried specialists, and I do not believe it will be very long before we have not only the hospitals and dispensary and nursing service for those who cannot pay, but a clinical service of specialists working in harmony with the physicians of the city, who will give complete and thorough examination for diagnosis, to the people of moderate means for one definite fee."

I asked Dr. Parnall to tell me what he thought were the definite results obtained so far from the central organization. He answered:

"Our organization has not been on the present basis for a very long time, but we now have things

"Could you give me some approximate figures as to the cost to the administration of the work of the centralized organization?"

"Yes. The new hospital has cost about \$250,000. The land, valued at \$30,000, was given to us by Mrs. W. A. Foote of this city. The city budget for this year includes \$72,000 for the hospital, \$23,000 for health protection, \$12,000 for tuberculosis, and as much as needed for contagion. Last year we turned back to the city nearly \$10,000 from our budget, so we have proved that centralized organization methods are economical."

I interrupted here: "Forgive the question, please, but your work is such an important experi-



Fig. 3. Cheery and warm in spite of the weather outdoors.

so planned that the definite end-results will soon be shown in figures. First, we have the awakening of the public conscience to the necessity of controlling disease, and the better health and economic saving accomplished by that control. Take, for instance, this one example:

"Since we began the infant welfare work three years ago, the mortality in that field has decreased from 106 per thousand to 84 per thousand. This is something that the people can all understand.

"The growth of the work which the organization has brought has already necessitated replacing the old City Hospital with this new building, thoroughly equipped to carry out the work we do and the work we plan to do."

ment, and its success or failure will mean so much to other cities that will try to follow it, that I am going to ask you a very pointed question. Can your work here be kept clean of politics?" and Dr. Parnall answered emphatically:

"Yes, indeed, it can be and it is. The commission stands solidly for the public health and welfare. My assistants are capable, efficient people, all specializing in their own line of work. The city ordinance provides that all our employees shall be appointed by the health officer with the confirmation of the commission, but shall serve only during the pleasure of the director. The commission willingly appropriates all funds necessary for health protection, hospitals, and public welfare."

Just then a nice black-haired girl in a white uniform entered, and she looked so tired that I almost knew to what department she belonged even before I was introduced. In these days that are meatless and heatless, and wheatless and porkless, and maidless, it is easy to recognize the dietitian.

"How do you do, Miss Hill?" I said. "Do you serve repeated menus?"

She looked perplexed for a minute. "What do you mean?"

"Oh," I said, "do your people know they are going to get boiled ham and canned spinach and boiled potatoes and rice pudding on Mondays, and

has a well-arranged and equipped kitchen, a bakery, refrigerating rooms, large and sunny nurses' dining and serving rooms, a special diet kitchen, a vegetable cellar, stores for food supplies and drug supplies, and a well-built and equipped autopsy room.

The other side of the main basement is given entirely to dispensary service with its own separate outside entrance and admitting room, physicians' assembly room, emergency operating room, radiographic laboratories, and examining rooms for the different clinical departments.

After seeing the regions below, we came up to the first floor again. In the entrance hall the soft gray Windsor chairs blend smoothly with the soft gray walls, and the whole atmosphere as you come into it gives a different impression altogether from that created by the usual golden oak atrocities, the anxious seats, the combined odor of disinfected pus and the unwashed, and the dingy green or colorless tan walls which rise in our memories of first hospital impressions.

The first floor plan includes children's wards, well separated from the rest of the floor service, and some other sunny, attractive wards for both men and women. No ward has more than six beds, and each has its own individual equipment and bathroom service. The corridors between are wide and airy, and there is plenty of light everywhere. Each unit and department of service seems to be thoroughly separated from every other department, and the cut-offs and the swinging doors as you enter each one are very distinctive and keep out noise. It will be easy with ordinary precautions to prevent the spread of infection from one department to another.

The diet kitchens are well equipped, and each has a practical table which combines stove plate and toaster, a dish-warmer, a top which keeps dishes of food hot, and a sterilizer for infected dishes. This table, I understand, was designed by Dr. Goldwater of the Mount Sinai Hospital, New York. The floors, of battleship linoleum tiles, are good looking, easy to walk on, and will be easily repaired.

The private rooms are attractive, and each one has a dresser, which has an arrangement making the top drawer into a desk where the special nurse may keep her chart or the convalescent patient do his writing. The sun parlors are delightful. Out of doors the thermometer registered below zero, but they were so warm and cozy that convalescent patients in the rose-colored cretonne-covered willow chairs were sitting close to the windows and even the potted plants and ferns looked cheerful. Wouldn't you like to have a dollar for every cold-



Fig. 4. The new citizen that Jackson believes to be its civic responsibility.

roast mutton and canned peas and mashed potatoes and pie on Tuesdays, and hamburger steak with tomato sauce and——"

"Well, I should say not," Miss Hill interrupted here. "Not if I have to stay up nights making out menus. Where did you learn all that?"

"I lived for two years in one hospital with that menu once upon a time," I said, "and I had plenty of time to learn it by heart, but I'll tell you a worse story than that. I met a nurse out West who had trained for three years and supervised for five years in one hospital where they had canned salmon and boiled rice and stewed apricots for every Saturday evening supper while she was there."

Dr. Parnall, Mrs. Moore, and myself then started out on our rounds to see the new hospital building which was opened for patients the first week in January and has a capacity of 110 beds.

The heating and lighting plants are in the sub-basement. The basement itself on the one side

storage hospital sun parlor you have seen where you were told as you peeked through the door into its icy interior how lovely they were in summer?

The operating rooms, I thought, were well arranged. I liked having the room where the instruments and utensils were sterilized and the ordinary cleaning done placed near and between the two main operating rooms, and the dressing sterilizers placed in the nurses' work-room. This arrangement shows plainly how the nurses' tired feet will be saved, and only the Lord and the nurse herself know how hospitals that are built without this thought in mind may at night bring pain that reaches up into the hips and brain and makes the next day a dread to begin.

When you go through the obstetrical wing you get the impression of the public value of this service very distinctly. There are no large wards; no room has more than two beds in it, and there is absolutely nothing in the atmosphere to mark it charity. Everything is well planned, and the service which will be given to the poor woman of the city for little or nothing just because she is entitled to it will be just as good as the service given to another woman who gets the same thing because she can afford to pay for it.

I persuaded Mrs. Moore, the superintendent, to sit down and hold Baby Jackson for his picture. That wasn't the baby's real name, but I thought as long as I could not use his real one to print, I ought to give him the name of his foster mother, the city which is going to guard him so carefully.

Out of doors the temperature offered no inducement for us to visit the roof, but I was told that it is arranged and equipped for open-air treatment and recreation. We went everywhere else from the cellar to the garret and everywhere saw good construction, equipment, and service. I don't believe I have ever been in a hospital where I had such a distinct sense of having to go only the necessary distance to get anywhere. If you asked, "Where is the diet kitchen?" or "Where is this or that?" the answer would be, "Just over there," or "Right down on the left." It never seemed to be, "Go as far as you can, turn to the right and then to the left again, and keep on going as long as you can."

Mind you, nothing here in construction or equipment is elaborate or expensive. The hospital is well but not ostentatiously planned, and furnished with plain things looking sanitary and practical. Your impression from the time you go into the front door till you come out of it again, however, is this: that your architect, your builders, and those who have been responsible for this build-

ing and its equipment, have put time and thought and conscience to getting the best out of the money appropriated for the work.

The hospital was just opened January 1, and everything, of course, is fresh and new and attractive. It was designed and planned by a well-known hospital architect and built conscientiously by people who have made a specialty of hospital buildings. The results were distinctly noticeable and far different from those that can ever be secured by local architects and builders who are given the job just because they are local or can pull strong enough to get it, and whose average experience in building consists of a schoolhouse and a county jail, a few dwellings or store buildings.

Later in the day I met Miss Wanda, superintendent of public health nurses, in her office of the department of public health. Miss Wanda is just her first name; nobody ever tries to say her last one. It sounds like the Polish city that was tossed about between the Huns and allies in the beginning of the war, and everybody calls her Miss Wanda for short. She speaks several impossible languages and dialects, and is an indefatigable worker, and she and her six nurses are an invaluable support to the bureau of public health. The city has a very large Polish industrial population; it has three large parochial schools, and the bureau of public health is planning for a parochial school inspection. Another new nurse, whose name is all consonants, is coming to help in this inspection.

The old fairy stories all end by pointing a moral to the tale. The moral to this one is rather long and may take a long time to prove itself, but that it will prove itself we have come to believe. We have all dreamed of the real community hospital where the people themselves, through their civic government, take the responsibility for the public welfare, for humanity's sake, for the sake of the future generations, and for economy's sake.

This hospital at Jackson is not only a community center, which in itself is unique and ideal in our present scheme of things, but it has what we usually expect only of the university hospital and the teaching institution of high standing in the hospital world which may have from 250 to 400-bed capacity. The work that Jackson is doing is really wonderful when you stop to think of it. Of course, there are plenty of other good city commissions and hospitals and specialists and public health nurses doing splendid work, but where can you find them so centralized and working together as they are here, and where else can you find a city of 50,000 people taking the responsibility that this city has taken as a civic duty and as

an economic measure? That they have a political administration with a vision large enough to understand this economic value as well as the Christian charity of such an organization, and that it is willing to use enough of the city's funds to protect the health and future of its citizens, seems to be a splendid thing and cannot help but be an inspiration to other cities to do the same, now that a successful precedent has been established for them to follow.

Twenty years ago, when Jacob Riis said that it was cheaper for a city to protect the public health and welfare than to have the ulceration of a slum fastened upon it and to pay out good money to support prisons, insane asylums, and poorhouses,

he was called visionary, but today we are beginning to live in the midst of some of his visions, and the time may not be far off when they can no longer be called visions, but just everyday routine. So the world moves.

There is little use in writing or telling about a good thing that other folks might want to copy unless you give the formula in order to make it. Here it is:

R—1 good city.

5 good commissioners (not politicians).

1 good executive for the commission, who must be a physician and surgeon, of the best training and highest ideals of public good, who has the conviction and courage to put a thing through in spite of all the difficulty and criticism that he will meet.

FROM THE FIELD EDITOR'S NOTE BOOK

Progressive Hospitals in Michigan, Illinois, and Iowa—Interest Taken in Hospital Standardization by the Sisters—An Illinois Hospital Controlled by a Women's Club—A Model Railroad Hospital

We have long desired to make THE MODERN HOSPITAL more personally helpful, as it were, to the hospitals of the country, and we believe that a way has been found to do so. The visits of our field representative will, we trust, bring the hospitals more closely into touch with us and with each other, and will offer a means by which the achievements and improvements of individual hospitals will be recorded for the benefit of others, and the problems of each may be worked out by the help of all.—EDITORS.

Blodgett Memorial Hospital, Grand Rapids, Mich.

When you become inclined to grow pessimistic about hospital administration and conditions and lack of teamwork, or feel that hospital positions are only temporary things, read the following:

Miss Ida M. Barrett, the superintendent of the Blodgett Memorial Hospital in Grand Rapids, Mich., formerly the Union Benevolent Association Hospital, has just celebrated her twenty-fifth anniversary. Miss Welch, her assistant, has been with her sixteen years and shares with her the credit of the growth of the hospital from a small residence building to an institution of 125 beds, having one of the finest hospital buildings in the middle west.

The superintendent of nurses has served for eight years and leaves only to go to France. The surgical nurse has been the greater part of fourteen years with the organization; the office nurse has been there for eight years; the cook has cooked for sixteen years; the engineer came to work for the hospital when he was fifteen years old and stayed until he died.

Miss Barrett tells a little story that I think might help someone else over a bad place some time.

One blue day some years ago everything had gone wrong, and life did not really seem worth the living (you know the kind of a day I mean—when the whole world looks to you a sort of a sickly pea-green color, when perhaps some doctor or someone in authority has been unreasonable and you have felt so humiliated that instead of meekly saying "yes, doctor," you wished you had been big enough physically and financially to have escorted him

outside to express your feeling toward him with your hands). On such a day as this Miss Barrett says she went through the hospital with all her discouragement showing in her face. A little nurse touched her on the arm and said, "Please, Miss Barrett, look at the clock; it is noon now. Remember, if you can live through the day till noon, you can live through the rest of the day."

St. Mary's Hospital, Grand Rapids, Mich.

I made a very profitable visit to St. Mary's Hospital, which is administered by the Sisters of Mercy. The hospital has a capacity of a hundred beds, and is certainly one of the most progressive hospitals in charge of the sisterhoods. I was particularly impressed with the desire of the sisters in charge to meet the demands of hospital standardization. They are fine, progressive, thoroughly educated women who will leave no stone unturned to make their hospital right, and to give their nurses an education according to our best standards.

Cleanliness and order greet you here at every turn of the hallway, and the kindly attitude of the sisters, their courtesy and friendliness, will always be a pleasant memory in my hospital visiting. They pride themselves on the fact that the nine supervising sisters are all graduate registered nurses of Michigan.

The pathological laboratory is thoroughly equipped for bacteriological and serological examinations, and has a full-time woman pathologist in charge. The radiographic laboratory has new and complete equipment and a clever home-made tube table designed by Dr. Moore,¹ the roentgenologist. One of the sisters, who has had special training, assists him in this work.

The records—clinical, history, pathological, and training school—are as complete as you would find in a teaching institution of much larger staff and bed capacity, and if there is anything of this kind which they do not have, they want to know about and get it as soon as possible.

In the leaflet sent to applicants for admission to the training school and among the rules for nurses is a para-

¹Described by Dr. Moore in an article published in this issue.

graph which sounds as if it might have come from the pen of our mother of nursing, Florence Nightingale, and reminds us again what the spirit of nursing really means, even though we sometimes lose sight of it, in our reaching after technic and advanced education.

"Nurses must always conduct themselves with a lady-like reserve, and prove themselves true children of the house, by their cheerful obedience, gentle manners, and upright actions. Each nurse must bear in mind the fact that the success of every well-organized body lies largely in its discipline. Nothing will so surely aid the nurse in becoming efficient as a genuine docility of spirit, and a determination to conform in every particular to the requirements of the institution."

The hospital also publishes a booklet measuring about five and one-fourth by three and one-fourth inches, its contents much like those of our old stand-by, the little red-leather-covered "Amanda Beck." It is easily carried in an intern's or nurse's pocket, and tells the rules for charting, signs and symptoms, weights and measures, solutions, and food values.

I felt quite proud when I learned that four copies of *THE MODERN HOSPITAL* are taken here and that the reading of this and the *American Journal of Nursing* constitutes part of the nurse's curriculum.

Sherman Hospital, Elgin, Ill.

This hospital, recently enlarged to a capacity of seventy-five beds, is practically self-supporting and is controlled by the Elgin Woman's Club, through a hospital board appointed from members of the club. These conditions of hospital management seem to be unique; this institution, so far as we know, is the only one existing as a department of a woman's club organization. The hospital report is published on one page of the annual report of the club.

Miss C. Irene Oberg, the superintendent, who has been with the hospital for ten years, is a good executive, and under her capable administration the hospital has progressed and gradually added better standards to its economic and training school management. Miss Oberg has until recently been her own bookkeeper; she does the radiography for the hospital and teaches in the training school.

The school has twenty-four pupil nurses, and affiliates with the Illinois Training School in order to give the nurses clinical material for an all-round nursing education. Recently a well-equipped special diet kitchen was installed, where the nurses receive class instruction from the teacher of dietetics in the city high school. A resident dietitian and instructor will be added to the staff later.

A comfortable nurses' home stands next to the hospital, connected by a covered bridge with the main building. The nurses' dining room is in the basement, away from the odors and noises and interruptions of the hospital.

An interesting piece of equipment was noticed in the basement linen room. This is a small mangle, heated by gas and operated by the ordinary 110-volt lamp socket current, which turns out in emergency the towels, gowns, and small pieces needed without the necessity of getting up fifty to seventy pounds steam to turn the general laundry machinery.

In the superintendent's suite, there were well made and attractive pieces of furniture of the arts and crafts type designed by Miss Oberg and made by the engineer, whose clever handiwork was seen in several other places through the hospital building.

This hospital certainly shows a creditable spirit of pro-

gressiveness and a desire to meet standardization. Its patriotism is unquestioned. It follows the regulations of the Food Administration, and nine stars stand out on its service flag for nine nurses from its school who serve with the colors.

The hospital economics have surely been in good hands, as only a small deficit shows at the end of each year, although the ward and moderate-priced private-room rates can hardly cover the cost of maintenance in these times of inflated prices for everything used.

Butterworth Hospital, Grand Rapids, Mich.

Butterworth Hospital is distinctive because of the number of things in the way of needed equipment it has made with small cost for material and the labor of its own minds and hands. Here are some of them which have been designed and planned by the doctors and the superintendent and carried out by the engineer and carpenter:

Electric lighting fixtures of gas piping; only the necessary lamp fixture itself was purchased intact.

An adjustable examining and treatment table in the eye, ear, nose, and throat room of the dispensary, with all equipment necessary for this special work.

An ether vapor anesthetic apparatus made of bottles, rubber tubing, and tin container.

A three-story cart, with its floors made of steel wire screening, where the steamed packages from the sterilizers may dry out while being carried to their cupboards.

These things and many more which the hospital has to have and cannot buy are in daily use and give good service.

In the same hospital, Miss Elizabeth Selden, the superintendent, uses her knowledge of amateur photography in the training of her nurses, and has made a very interesting series of small photographs to illustrate the various steps in the process of making a bed, lifting a patient, and giving various treatments.

Illinois Central Hospital, Chicago

The Illinois Central Railroad Hospital has a wonderful outlook from its windows. Just in front is the broad driveway, then a hedge of thick shrubbery on the edge of a lagoon, beyond that the shabby white domes and pillars of the Field Museum, once the Art Palace of the World's Fair, and beyond that again Lake Michigan stretches away and beyond your vision. The outer architecture of the building reminds one of a stately college building on a New England campus, and you feel as if there should be ivy creeping around its corners. The entrance hall is circular, marble-walled and has the appearance and dignity of the entrance to a good hotel. The hospital interior is toned mostly in gray and has very attractive and comfortable sun-rooms at the end of each corridor.

Miss Helen Jones, the assistant superintendent, who chaperoned me through the building, asked me if I didn't want to see the Zander room, and I said, "Why, of course I do. If there is any one thing I love especially it is a Zander room, but what is it?" The Zander room at the Illinois Central, Miss Jones assured me, was the only one of its precise kind in captivity. It is equipped with the most wonderful appliances for the exercise of bones, muscles, tendons, and motor nerves which have been partially destroyed or anesthetized after traumatism, and here your arms, toes, and fingers may be automatically wiggled until they become themselves again.

There are no large wards; the railroad employees get the private service and intimate care which would cost a private patient a goodly sum in a general hospital. The hospital has 108 beds, employs twenty-five graduate nurses and six interns, has complete laboratory facilities, dis-

pensary service, and a splendid laundry, which has the highest-grade machinery. The dining room, originally planned for the help, was small and at the top of a long stairway leading out of the main kitchen. As the help did not seem to enjoy running up the stairs with the food, another dining room was made for them. The dressing room and dumbwaiter space does not seem adequate.

My nose, which is the only real authority I possess on ventilation, told me as we journeyed through the building that the air supply was wrong somewhere, but my eyes and ears pronounced the Illinois Central a very attractive and interesting hospital.

Miss Mabel Christie, the very competent and charming superintendent of the hospital, seems to fit her position as a good glove fits a well-shaped hand.

St. Anthony's Hospital, Carroll, Iowa

Down in Iowa, in a little town of only four thousand people, is a splendid hospital, filling its place in its own county just as well as a great institution does for its own population in New York or Chicago. The farmers' wives from an area with a hundred thousand population come

of dinner and had more jam on the outside of his mouth than inside of it. The nurse in charge looked as sunshiny as the rest of the place; she held out her hand and said, "How do you do?" and then I remembered her from quite a long time ago, a slim, frightened little probationer, without the dignity of a cap or the black band on it.

Grace can certainly be congratulated on the children's ward and the work being done there, and congratulated, too, on the forty-eight stars on the white field of the flag which flies over the office in the entrance hall.

Ottumwa Hospital, Ottumwa, Iowa

The Ottumwa Hospital in Ottumwa, Iowa, is a fifty-bed hospital which has proved conclusively that an average hospital of this size in a city of twenty-five thousand people can, with the proper effort on the part of its directors and staff and superintendent, bring itself up to standard.

The hospital gives the best of nursing care to its patients, and has well-equipped radiographic and pathological laboratories. The pathological laboratory is in charge of a full-time salaried pathologist, and the nurses receive training there as part of their curriculum.

This hospital is administered by the Ottumwa Hospital Association, a body of broad-minded and capable women directors, who understand the value of the hospital to the community, and use every effort to improve its service.

St. Mary's Hospital, Detroit

St. Mary's Hospital has certainly made progress in the last few years. This hospital until recently was seriously handicapped for lack of proper quarters and equipment to properly carry out the large amount of work it was doing.

New wings have been added to the hospital; a fine operating room suite and a new nurses' home has been built, and a very definite advance

has been made in the nursing education. The sisters in charge are most desirous of doing everything within their power to bring the hospital up to present standards of efficiency.

Mercy Hospital, Muskegon, Mich.

Mercy Hospital is planning a new and thoroughly equipped hospital building in the near future. This hospital has had its present quarters in the old Mason homestead property for the past fifteen years, and has gained the respect and confidence of the people of the city by its conscientious work, which has been accomplished in spite of the handicap of cramped quarters and the lack of needed equipment. Muskegon is an industrial city, one of the Michigan cities which has almost doubled its population since the beginning of the war, and there is a need for larger hospital facilities.

This hospital shows its patriotism by giving care free of charge to all cases of civilian relief, members of families of soldiers now with the colors.

After all, the best thing one can do when it's raining is to let it rain!—Longfellow.



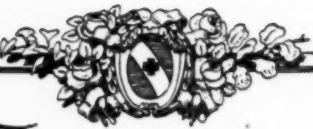
A corner of the nursery, St. Anthony's Hospital, Carroll, Iowa.

here for maternity care, and the new babies in the picture are getting a start in life that was not possible for their mothers and grandmothers to get. Every baby that goes back to the farm is a booster for the hospital, and is a part of an educational propaganda for the village in which it will live. St. Anthony's will be made the subject of one of the "Little Journeys" in a later number.

Grace Hospital, Detroit, Mich.

The new children's department at Grace Hospital is beautiful, and anyone who remembers the old quarters, where it was almost impossible to do good work or even keep proper isolation, cannot help but become enthusiastic over the big sunlit glass-sided rooms, where even the very sick babies seem to be happy. Part of the roof has been used in the making of this new department, and here, high above the smoke and noise of Detroit and all the crowds of its recent mushroom growth, the babies and the older kiddies get the air and sunlight first hand.

One plump little chap who, it was said, had come into the hospital with just the width of a thread between him and "the other side," was getting away with a big trayful



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The Fight for Hospital Standards in Pennsylvania

In connection with Dr. Baldy's article on "Standards of Hospital Education for Interns," we wanted to say something editorially in regard to his work in Pennsylvania. No words of ours, however, seem so fitting to any account of Dr. Baldy's work as these of Dr. Edward Martin's, from his address before the conference on hospital standardization of the American College of Surgeons:

"In Pennsylvania we have a man named Baldy. Some of you know him. I have not been able to trace his family history, but there is an old Greek story of a dragon which shows its teeth. Baldy is a dragon. He is a fighter. He would rather fight than eat. He is honest, truthful, fearless, and a man of broad ideas and ideals. He received the appointment of President of the Bureau of Medical Education and Licensure and promptly started in to establish hospital standards. . . . Now Dr. Baldy's idea is that the function of a state board is to protect a community by requiring sound training of its medical practitioners. And with this idea in mind he inspected every hospital in the state of Pennsylvania. He studied the question of a minimum standard of efficiency as it relates to equipment, the staff, the number of patients, etc. No man receives a license in

Pennsylvania to practice medicine unless he has had a year's training in a hospital approved by the state board. Dr. Baldy laid down a standard for the hospitals in the state to live up to. The various boards of managers thought at first that he was a little too exacting and dictatorial. But in one week he accomplished what hospital staffs had been trying to do for five years. He got the standard for which we so earnestly pleaded. The hospitals got specialists on the staff, x-ray men, and laboratory men. Dr. Baldy's weapon to force hospitals in line was this: Unless hospitals met the definite standard which he recommended, they could not get resident physicians."

Dr. Baldy states that "certainly no one can justly accuse me personally of the whole thing. There has never been a time from the beginning of the organization of this bureau that I have not had back of me heartily and unanimously every member of the bureau. No step forward has ever been taken without full counsel and consent of the bureau as a whole, and if any credit obtains it certainly belongs to the bureau as a whole. The present medical act was passed in 1911. You know the bitter fight which took place in 1909 and how badly the profession lost out. I was asked to assume charge of the bill in 1911 and succeeded in putting through the present legislation. Practically I was alone in that matter. The present bureau was immediately organized as the outcome of that bill and since that every member has shared in the responsibilities of what has been done. The first move of the bureau was to bring peace and order out of chaos which existed on account of the enmity of the medical schools for each other and of all the schools combined with the state boards. It then moved for an increase in standards, first obtaining the consent through persuasive measures of all the schools, and it went to the legislature at the 1913 session and had the standards advanced from a four-year high school preliminary standard to the additional requirement of a year of college work in physics, chemistry, and biology. At this same session, again with the consent of the schools, it had the intern service of not less than a year added to the state requirements before any graduate could come to the state examinations. The bureau at once realized the fact that to have a competent intern year would necessitate a more or less control of the hospitals. The bureau began the work of standardizing the hospitals by an inspection of all the hospitals of the state. After summing up the situation, it formulated a minimum standard that was possible in order to secure proper results and notified each hospital wherein it actually fell short

of this standard. After obtaining as much progress as possible by persuasive methods, the bureau asserted its legal powers in order to secure further advance."

The bitterness of heart engendered by Baldy's activity is surpassed only by the promptness of action on the part of hospital boards in instituting the improvements upon which he insisted. His bureau has further caused the hospitals to open their wards to cases of venereal infection; has through act of assembly placed the control of the practice of midwifery in its hands, and has administered it more comprehensively and better than is done in any part of the world; has wisely and helpfully settled the status of drugless healers, who before they are licensed to practice upon the citizens of the commonwealth must have had a preliminary education equivalent to that required of the regular graduate of medicine and has assured to the citizens of Pennsylvania, in so far as this is possible, at least an adequate training to any man who shall receive a license which entitles him to take into his hands the responsibility of their life and their health.

Baldy and his board have accomplished in a brief time in the direction of a more efficient practical education what even the optimists of a few years ago would have regarded as impossible of attainment within twenty years. To him and to his board the state of Pennsylvania owes a lasting debt of gratitude.

Preparedness in the Hospital Field

Hospitals suffer more from lack of foresight than from lack of funds. There are hundreds of hospitals today suffering acutely from both—and one aggravates the other. Because of the difficulty of raising funds or the high prices of building, hospitals are not being built now, and the probabilities are that after the war the same hospitals will remain unbuilt for the same or other easily found reasons.

Admittedly it is no small task to raise funds for a hospital in these days (or at any other time), and for good reasons. Where the community needs the added facilities and the management deserves the support of the community the funds are forthcoming, and liberally. But hospitals are so frequently a chaotic jumble of additions, alterations, and makeshifts that during the most casual inspection by a layman the whole thing looks as sensible and orderly as the Trotzky-Lenine rule of Russia. Is it surprising that the layman wonders whether there can be any efficiency in such institutions? Hospitals are no longer hesitating experiments, but the "measure of civilization," and

a well-ordered, sensibly arranged growth is as possible as is the growth of our manufacturing institutions or our colleges.

And our hospitals are facing an era of expansion which promises to make the growth of the past decade appear infinitesimal. Some of the factors in this expansion are: the "hospital year" before license to practice medicine; the demands of the returned army surgeons, reeducated to the necessity for scientific study and care of their patients; the constant scrutiny of standardizing bodies such as the American College of Surgeons and the American Hospital Association; and, far more important than any of these, the rapid strides which health and accident insurance has made, and the rapidly increasing realization of the public that the hospital and not the home is the place for the sick.

These are but few of the omens which the progressive hospital management sees, sometimes with considerable perturbation. The answer, of course, is obvious—"Be prepared." And the first step is to spend considerable time and thought on the ordered development of the institution. Don't be in the position of the institution which last year spent four thousand dollars remodeling its operating department, only to find that the money was wasted because this year's addition must be so placed that the remodeling is of no avail. The mistake made in this institution illustrates that lack of foresight which is so common and so entirely inexcusable, for not only is the operating department threatened by the new addition, but a \$125,000 pavilion less than a year old and a nurses' home just finished are so located that they materially interfere with the logical and easy growth of the institution. This hospital and its patients will continue to suffer for generations for this lack of a comprehensive development.

Architects all over the country are now idle and would welcome the opportunity to study these problems and arrange a building program for orderly, scientific growth, and every institution needs such a program, whether it has ten beds, or five hundred beds. The problems are many and intricate, and deserve the careful study of those experienced in hospital building. The solution must be flexible and elastic.

After this has been settled, the first building should be taken up in detail. Though it may be a long time before the building is to be erected, it would serve a double purpose, first, to interest the patrons of the hospital; second, to insure that every member of the board, staff, and management would have ample time for study and that

all criticisms might be discussed and considered before the building is commenced.

Changes in the building cost hundreds and often thousands of dollars; changes in the drafting room, nothing. And we are all familiar with the extravagant changes in the building due to lack of thought by those concerned most intimately in the hospital affairs. By this method, time is allowed to study all possible arrangements and to insure that only the most efficient and truly economical shall be incorporated into the building. Time is allowed for inspection of promising materials and details so that no glib salesmanship will "put over" something undesirable or untrustworthy.

Everyone is familiar with the time-consuming delays during the consideration of plans. It is either the architect, the building committee, the staff, the superintendent, or all combined who seem to make the progress a veritable snail's pace, materially delaying the beginning of operations on the site. And architects will be a very busy set of people when the pent-up building activity smothered by the war bursts forth, and will try to divide their energies and thoughts among a great many urgent clients. Why not use the architect now and get the benefit of a mind free from other problems, instead of the bewildered efforts of a poor draftsman?

Architects will do this for very modest retainers, and apply these retainers on the commission when building work proceeds. The cost is negligible, and is really an investment. The value of the result when experienced hospital architects are employed is obvious. Well-planned and economical hospitals are strangely like other human achievements in that they do not spring, Athena-like, full grown from the foreheads of their progenitors, but require painful study and labor.

Those who seize the opportunity will not only be prepared to take advantage of a decline in building costs or to anticipate the rising market, but will also set a definite goal for the patrons of the institution which cannot fail to increase their measure of respect for and interest in it.

The Battle on This Side

The world war has almost blotted everything else out of mind, or, at least, out of interest. Scarcely anything seems worth while that does not, directly or indirectly, tend toward victory. Those of us who have to stay at home at times can scarcely feel that it matters whether or how we fulfill our tasks, so insignificant, so trivial do they seem beside the great and terrible things wrought in anguished sweat and blood on the battle front.

We need to be reminded that the war is being fought, not merely against something, but for something—not merely against brutality and autocracy, but for a better, a reconstructed world. If we are not to slip back into the dark ages, we must press forward into the new day. And, while our soldiers are fighting, some of the rest of us must see that the constructive ideals which they are fighting for are not lost on this side. They are plowing the field; what good will that be if when the plowing is done there is no seed wheat to sow in the furrows?

One of these germinal ideals which must not be allowed to die out while we are busy fighting the Hun is that of making the hospital not merely a place for receiving and curing the sick, but a civic center from which radiates community health and community welfare. Many hospitals in large cities are on the way toward a realization, in greater or less degree, of this ideal. Can the average hospital of from fifty to one hundred beds, in the average small city, teach and preach health and hygiene to the citizens and dispense charity where needed, besides providing for medical and surgical needs of this movement? The little city of Jackson, Mich., says that this is possible.

In the first of our field editor's "Little Journeys," appearing in this issue, something is told of the inspiring fight waged by the commissioner of health of Jackson for the civic welfare of his community. We hope that other communities may be encouraged by this fine record of Jackson. If enough of the hospitals in our smaller communities will do as well as Jackson, we may feel assured that the battle on this side will be won.

Features of Special Interest in This Issue and the Forthcoming Volume

Hospital people in various branches of the work will find a number of particularly interesting articles in this month's issue, and we cannot refrain from calling attention also to others to be published in the near future.

Among the papers of general interest to hospital administrators is one soon to appear by Dr. Henry E. Tuley, superintendent of Louisville City Hospital, on "Some Problems of Hospital Management," besides one by Mr. Joseph Geffen, superintendent of Mount Sinai Hospital, Philadelphia, on "Visitors and Visiting in Hospitals," and one by Dr. Charles B. Bacon, medical superintendent of New York City Hospital, on "Self-Government for the Resident Medical Staff." A forthcoming article by Mr. Pliny O. Clark, superintendent of the Ohio Valley General Hospital, treats of "Hospitalism—Its Causes and Treatment." Readers of

Dr. Baldy's important article in this issue on "Standards of Hospital Education for Interns" will be glad to know that he rounds out his discussion of the subject in an article soon to appear, called "Has Every Hospital an Inherent Right to an Intern?"

One of the most important features to appear this year is the series of nine articles on "Hospital Accounting" by Charles A. Porter and Herbert K. Carter, of the staff of THE MODERN HOSPITAL, which begins in July. The authors, both expert accountants, during the preparation of this series of papers studied the systems of accounting installed in many hospitals and held many conferences with expert hospital accountants and hospital administrators. It is believed that this series is the best piece of work on hospital accounting that has ever been done, and that in presenting it THE MODERN HOSPITAL is doing a real service to the institutional world. It is well worthy of general study, because, even though the system may not be found suitable in its entirety in every kind of institution, some part or another will undoubtedly prove valuable to almost any hospital.

Small hospitals may look forward to a number of articles of special interest to them. Several appear in this issue, in which begin two series of particular interest and importance to people in the smaller institutions. These are the "Little Journeys to Places and People Worth Knowing," by our field editor, Miss Margaret J. Robinson, and "From the Field Editor's Notebook." These are records of personal visits made by our representative to the various institutions described, through which it is intended to call attention from time to time to the excellent work done in these smaller institutions and those situated away from the larger centers of population. Among the other articles which are likely to interest administrators of small hospitals is one by Dr. F. B. Sampson of Creston, Iowa, on "A Plan for Developing Efficient Modern Hospital Service for Smaller Hospitals and Local Communities." Dr. Sampson is doing remarkable educational work in his community—work which is comparable to that of Dr. Parnall at Jackson, Mich., described by Miss Robinson in this issue. Mr. Emmet E. Bailey, architect, of Oil City, Pa., contributes an unusually thoughtful and interesting paper on "Plans for a Complete General Hospital for a City of Four Thousand." Dr. Foster Kendrick Camp, superintendent of Wesley Hospital, Oklahoma City, has accomplished some rather unusual things in his own institution, and his article on "Maintaining the Standards of the Small Private Hospital," will be worth looking forward to. Three more articles

from the West and South are: one on "Training of Male Nurses at a Small Hospital," by Dr. Benjamin Bailey, superintendent of Green Gables Sanatorium Lincoln, Neb.; one on "The Community Hospital as Viewed by a Nurse," by Miss Margaret Harrison, surgical supervisor at Kerrville Sanitarium, Kerrville, Tex.; and one on "The Community Hospital of Lexington, Miss.," by Dr. L. S. Rogers, of Jackson, Miss. The manufacture or adaptation, at moderate cost, of apparatus usually obtainable only at considerable expense is a subject of much interest to small hospitals. Of special value, therefore, is a paper by Dr. V. N. Moore, roentgenologist at St. Mary's Hospital, Grand Rapids, Mich., on "The Installation of a Modern Roentgen Equipment at a Moderate Expense," and one on several devices invented by Miss Elizabeth Selden, superintendent Butterworth Hospital, Grand Rapids, Mich.

Tuberculosis hospitals also are well represented. Dr. Robinson Bosworth, executive secretary of the Minnesota Advisory Commission of the State Sanatorium for Consumptives, is to contribute an article on the standards of the tuberculosis hospital. Dr. Stephen A. Douglass, superintendent of the State Sanatorium of Tuberculosis, Mount Vernon, Ohio, tells how his institution solved the labor problem and converted an institution farm from a liability into an asset. Dr. Walter C. Klotz, resident physician at Barlow Sanatorium, Los Angeles, describes a new four-patient cottage which is said to be very economical in cost of construction and upkeep. Another architectural paper is one by James D. Burt, architect, of New York, on a tuberculosis sanatorium for fifty patients, also planned with a view to economical construction and administration. An article on Riverside Sanatorium, Granite Falls, Minn., by Sund and Dunham, the architects, Mrs. Sara W. Dunton, the superintendent, and Dr. Robinson Bosworth, covers the various phases of architecture and administration.

Among articles of interest to institutions for nervous and mental diseases are one on "The Standardization of Hospitals for the Insane," by Dr. William C. Sandy, assistant superintendent of the Connecticut Hospital for the Insane at Middletown, and one on "The Standardization of State Hospitals," by Mr. A. L. Bowen, superintendent of charities, Illinois Department of Public Welfare. In this issue Dr. Noboru Ishida of Nagasaki, Japan, describes the non-restraint system used in the insane wards of Nagasaki Hospital, and Dr. Eugene Cohn, superintendent of Kankakee State Hospital, explains the workings of the open cottages for trustworthy patients at Kankakee. Miss

Jessie Luther, occupational instructor at Butler Hospital, Providence, writes on "Occupational Treatment in Nervous Disorders."

The cosmopolitan range of THE MODERN HOSPITAL'S contributors is emphasized anew this month. The contributions from war-worn France, which last month included Miss de Monclos's article on the Hotel-Dieu of Blois and Miss Ross's on the antituberculosis work in France of the Red Cross and the Rockefeller Commission, are continued this month by an article by Bertram Kelly on "American Aid to Paris Children." Another article from France, one on the tuberculosis hospital known as the Hopital Sanitaire 38 de Ste. Feyre, in the department of Creuse, France, by the medecin-chef, Dr. Paul Martin, will appear soon. Several contributions on Japanese hospital and medical conditions appear in this issue, among them the article by Dr. Ishida mentioned above, and letters from Baron Ishiguro of the Central Red Cross Society of Japan and Dr. T. Matsumoto, on, respectively, the hospitals of the Japanese Red Cross, and the recent progress of Japan in medical and institutional matters. Our front cover illustration shows one of the hospitals of the Red Cross Society of Japan, that located at Akita. We hope to have other articles from Japan and China as well.

This, of course, by no means exhausts the list of topics and contributors in prospect, but it is perhaps enough to give a foretaste of what is in store for our readers. Several contributions from Australia, bearing on the system of purveying adopted by the Hospital Board of Supplies of Melbourne, have been sent in and will probably appear soon.

The Convention of the Catholic Hospital Association

One of the most important meetings of the year is the convention of the Catholic Hospital Association of the United States and Canada, which takes place at Chicago, June 18, 19, and 20. The main topics for discussion will be "The Standardization of Hospitals" and "The Hospital's Work in Relation to the Present World War." It is obvious that these two subjects, which are to be discussed by authorities from various parts of the country, are decidedly timely and practical. Representatives of hospitals will have the opportunity of first-hand information from Dr. John G. Bowman and Rev. Charles B. Moulinier, S. J., the former being the general director, and the latter one of the hospital visitors, of the present great movement which is being systematically and thor-

oughly carried on for the standardization of all the hospitals of this country and Canada. At the present time both Dr. Bowman and Father Moulinier are making a tour of hospital observation in the East, and will therefrom have still more data of interest to present to the convention.

A new feature, and one that promises to be of especial benefit, is the plan for conferences, which are to be held during the afternoon of the second day of the convention. These include conferences of mothers general and mothers superior; chaplains; superintendents; teachers of training schools; supervisors of records; operating room nurses; anesthetists; laboratory workers; dietitians, and social service workers.

The Catholic Hospital Association was organized at Milwaukee in the summer of 1915, and was then pronounced by one of the leading authorities in hospital progress as the greatest movement for the advancement of hospital work that had taken place in the medical world for many years. The idea of this association was conceived by Rev. Charles B. Moulinier, S. J., regent of the Marquette University School of Medicine, Milwaukee, who, after carefully studying hospital conditions, was convinced of the urgent need and the inestimable benefit of such an organization. The results of the efforts that have been made since the beginning are excellent. Appreciation of the movement and earnest endeavors towards the scientific betterment of hospitals have been generally manifested, and it may be confidently stated that the work for the standardization of hospitals will have no stronger advocates and practical supporters than the members of the Catholic Hospital Association. The extent of its field and the possible influence for good of this organization may be gleaned from the fact that there are five hundred and twenty-two Catholic hospitals in the United States and ninety-five in Canada.

As a manifestation of the interest that has been shown, the association has active members in every section of this country and in several parts of Canada. The meetings of the 1918 convention will be open to all who are interested in scientific medical work.

Doctors Goldwater, McCoy, and Woodward to Select Site for Leper Hospital

Dr. S. S. Goldwater has been designated by Surgeon-General Rupert Blue as a "consulting expert in the public health service" to act in the selection of a site for the establishment of a home for the care and treatment of persons afflicted with leprosy. Associated with Dr. Goldwater in this task will be Surgeon G. W. McCoy, director of the Hygienic Laboratory, and W. C. Woodward, health officer, District of Columbia.

THE GREAT EXPLOSION AT HALIFAX, N. S.—A RETROSPECT

A Vivid Description of the Great Catastrophe—Splendid Work Done by Victoria General Hospital—Relief Work of Friends and Neighbors

By W. W. KENNEY, Superintendent, The Victoria General Hospital,
Halifax, N. S.

A few minutes after 9 o'clock on the morning of December 6, there descended upon the city of Halifax, N. S., beneath the blue of the bright winter sky, a bolt which laid waste its whole northern half, damaging in some degree practically every building in the town, many of them beyond the possibility of repair, and killing about sixteen hundred persons, many of whom were little children or young people. In a single parish—that of St. Joseph's Roman Catholic Church—there perished ninety boys under the age of sixteen years. A sharper, more dramatic contrast between the smiling winter morning and the black stupendous tragedy which darkened it is not conceivable. It was a perfect, an ideal Canadian morning of the early winter, not too cold, bracing, stimulating. The streets were full of normal life, happy, laughing children on their way to school, business men and women to their offices and posts of duty. In the north end of the city, a district which is populated by sterling people employed, in the main, in some one of the industrial concerns, and which was destined to suffer frightfully from the dread thing, the men had gone to their work, the women to their simple household tasks, while the children were playing about, or on their way to school.

The city was all alive with interest in the general elections which were to take place on December 8, and in which the momentous issue was—Conscription. As to Nature, all was bright and smiling; as to the people, they were happy and intent upon their usual vocations, working and looking forward to the coming Christmas holidays.

In the light of the dire events which darkened it, how great an irony seems the brightness and joyousness of that morning! In the Victoria General Hospital, patients, as well as the staff, were feeling the influence of its brightness. The sunshine flooded the wards, where matters were moving after the usual routine fashion of a general hospital.

With the suddenness of the lightning flash came the catastrophe, whose ravages cannot be fully repaired in a quarter of a century—some of whose ravages, indeed, can never be repaired. Some say that before there came the awful blast which heralded the descent of death and ruin, there was heard for appreciable seconds a pronounced "whirr" as of a revolving fan, or the drone of a near-by aeroplane.

"What was that?" was asked—the thunder which shook the city was the awful answer. The earth literally trembled; the city seemed to be falling under a blow from some giant force. Simultaneously there ascended from the harbor a cloud, fearful but beautiful, winding its black and silver spiral up, up, up, its only limit seeming to be the bright blue heaven itself. In seconds the streets were thronged with white-faced panic-stricken people making for the citadel and the common; the sight on these grounds will never be forgotten by anyone who witnessed it. Some details of that hurried "mobilizing" of the people which haunt the memory were of the aged and helpless carried on mattresses; of women with infants but a few days old, perhaps poorly clad, of children wide-eyed and speechless with fright, tightly clasping a household pet—a dog or kitten, or perhaps a bird; of others cut and fleeing from

what they knew not. Any place was to them seemingly safer than where they were.

The general belief was that the city had been shelled—that the Hun's was the hand that had dealt the blow. The truth, however, spread rapidly that a collision between a French munition ship laden with the deadly TNT and benzine had collided with an outgoing Belgian relief ship. But the terrible immediate pressure of effects relegated causes for the awful present to the last place in interest.

At the Victoria General Hospital, beautifully situated in extensive grounds in the south end of the city, the impression held that the city had been shelled and that the hospital was the first building to suffer—there was at the moment not the faintest realization of the extent of the catastrophe.

Immediately, however, events crowded to proclaim its proportion, for to the Victoria General Hospital, as to a fortress, began to flee people from every part of the city, especially the sorely stricken north end. Every driveway to the institution was quickly congested by teams and conveyances of every kind, all bearing the injured, the dying, in some cases the dead. Every door to the hospital was thronged by people blood-stained and in some instances terribly wounded and mutilated. Owing to the flying glass from nearly every window in the city, many of the worst injuries were in the nature of facial wounds, which with the freely flowing blood rendered the scene to the uninitiated all the more ghastly.

So terrified were the people, so large was the number of the injured, that throughout the first few days and nights the hospital was literally besieged by those seeking information concerning injured or lost relatives and friends. So great and sudden was the onrush that not only the wards immediately crowded to overflowing, but the floors of the wards, corridors, offices, or wherever space could be found was literally filled with the injured, the dying, the dead, all victims of the explosion. The demands of the time were unprecedented, and to the horror of the situation and its complications was added the fact that the two days following the catastrophe were bitterly cold days, with high winds and accompanying blizzards, two of the worst days of an extraordinarily severe winter. Cold, stormy, dreary were these days—unforgettable!

The Victoria General Hospital found itself face to face with a tremendous situation, sharing fully with the Camp Hill Military Hospital, the Halifax Infirmary, and the Station Military Hospital the demands of the first days of the disaster, until emergency hospitals were provided to facilitate the care of the hundreds of victims of the catastrophe. Later on the Children's Hospital, Pine Hill Military Convalescent Home, the Nova Scotia Hospital, Dartmouth, and established and improvised hospitals in New Glasgow, Truro, and Windsor, provincial towns, began to relieve the congestion.

Immediately there came to us hospital units from the United States, equipped, fresh, and ready for work, greatly relieving the situation generally, and directly facilitating the care and treatment of the injured—"a very present help in time of trouble." Doctors of the first distinction in Boston, New York, Rhode Island, and elsewhere, with skilled nurses and full supplies rendered us and our stricken city such services as have freshly strengthened all the ties that bind us in these days of common struggle for freedom and the world's peace. Americans, splendidly efficient, manned emergency hospitals opened up in the Ladies' College, St. Mary's College, the Y. M. C. A. building, Bellevue, the Waegwoltic Club

and elsewhere. The American Red Cross was speedily on the spot with finely efficient workers. To Americans—the Humane Society of Boston—we owe gratitude for a gift of money to be appropriated to the work of animal relief, as well as for two of its representatives, to assist our own energetic society for the Prevention of Cruelty in its work of mercy among those who could not speak for themselves, many of whom were humanely destroyed, while others were cared for and later returned to their owners.

The captain of the U. S. S. *Old Colony*, then lying in our harbor, at once placed at the disposal of the Victoria General Hospital the skilled ship's surgeon, Dr. Patterson, and further kindly offered to receive and did receive from us many patients whose condition would admit of their transfer. By this generous act the public heart was profoundly touched, and *Old Colony* is now a name which has a deeper meaning to the people of our city. Later on Drs. MacKenzie and Goodall, eye specialists of Boston, joined the forces of the Victoria General Hospital, greatly relieving the tension in this department where the proportion of injuries were relatively large and severe.

For the first days, however, following the disaster the full brunt of the situation fell straight upon the surgical staff of the Victoria General Hospital, the members of which for the first three days and nights had but little rest, and with only such contributory relief as was incidentally afforded them by the arrival of doctors from the neighboring towns, they carried on. This strain was of course extended to or extended itself to the resident staff, the nursing staff, the kitchen staff, the engineers' staff, the office staff—indeed, to all connected with the institution, who, in their various capacities, loyally and uncomplainingly bore their share of the demands of those direful days and nights.

It should be borne in mind, in attempting to realize fully the stressfulness of the time, that three things contributed to make it extraordinary: First, the crowding of the institution, in which there were then many other patients, greatly overtaxed its normal resources; the coming of the seemingly endless train of half-frenzied relatives and friends in eager search for the missing, and the fact that the main building—to say nothing of the other buildings—suddenly had five hundred windows thrown open by the explosion, all requiring to be closed against the inclement weather. Secondly, bedding, food, dressings, and kindred requirements, nurses, help, etc., in quantity and number immeasurably greater than the normal, were required and had to be furnished. And, lastly, with the building in its shaken condition, the weather on the two days immediately following, as has been intimated, was of a severity, in degrees of frost and snowfall, such as has rarely been experienced here so early in the season. But, in spite of all the stress, the rally of doctors, nurses, medical students, and volunteer helpers was noble and cheering.

In the administrative department there was a pressure such as can scarcely be understood, save by those familiar with the responsibility for the proper direction of the affairs of this branch of hospital work. The whole fabric of hospital order and routine was suddenly and violently rent; that it did not give way utterly perhaps may be taken as significant of at least an approach to what is sometimes spoken of in hospital circles as efficient organization and of promptness in response to the imperative demands of the hour.

The number of the dead is estimated to exceed sixteen hundred—that is to say, sixteen hundred persons were killed outright or died before they reached the hospitals

or but a few hours thereafter. To this number—more than one-thirtieth of the population of the city—predominantly children and young people—must be added those who, after lingering for many weeks of acute suffering, have died of their injuries. The total number of the injured reached over five thousand, many of them being more or less maimed for life. About two hundred and fifty persons suffered the loss of one eye; and about sixty were rendered totally blind, while more than one hundred and twenty-five suffered eye injuries.

The staff of the permanent hospitals could scarcely have continued to stand up under the staggering blow, had it not been for the truly magnificent rally to their aid of the home and neighboring towns, and more particularly of their friends across the border. From the United States, with the first fragmentary news to them of the descent of destruction upon the city, came back assurances of help, and royally were they made good. The explosion took place on the morning of Thursday, December 6, and on the Saturday following the first Massachusetts unit arrived under the command of Major Geddings. Exclusive of the Victoria General Hospital, which operated under its own management, the Army Medical Corps stationed here was then in full charge of the relief work, and had made ready for the Massachusetts unit, Bellevue, the mess quarters of the officers of the Royal Canadian Artillery and Royal Canadian Engineers. The grim tragedy had converted the institution into an emergency hospital, and such it still remains. On Sunday morning there quickly followed another unit from Boston in charge of Dr. Codman, whose distinguished skill was generously placed at the service of the poorest and humblest of the sufferers, and that with a simplicity which won the hearts of our people. Still another unit under Dr. Ladd of Boston was quartered at St. Mary's College, where some of the worst cases were treated, another from Maine under Major Elliott, and still another from the Rhode Island Hospital, Providence, R. I., under Major Hough, and here we see the hand, and heart of our old and valued friend, Dr. John M. Peters, superintendent of the Rhode Island Hospital. We'll no forget ye, John.

Nor should we in our retrospect omit to mention the splendid assistance rendered us in our distress by Toronto, Montreal, and St. John, N. B. The General Hospital, St. John, promptly sent us some twenty nurses, headed by the superintendent of the training school, whose places at home were to some extent taken by married nurses who willingly left their homes to do duty for those who came to us. Our friend, Mr. Webster, superintendent of the Royal Victoria Hospital, Montreal, fairly urged upon us by frequent telegrams assistance which was freely furnished by his palatial institution. But for these and other similar instances, together with the splendid and fortifying rally to our aid of our friends to the south, the difficulties of a time upon which we look back as the most terrible and darkest in all the history of our city must have been enormously increased, to say the least.

All about were the reminders of the woe wrought by the coming to our quiet waters of the ship of death—half of the city a desert waste, scarcely a building in it which did not bear the marks of the bolt of terror, windows gone throughout the residential as well as the business section of the city, and "boarding in" proving utterly inadequate to keep out the intense cold. Hundreds of homeless but physically uninjured required to be sheltered, clothed, and fed; icy winds howled with an almost malign violence; snow fell heavily, the mercury dropping, dropping to a point not often reached in these latitudes, and the con-

tinuance in varying degrees of these and kindred conditions rendered the more sickening the horror of a scene already drear enough, staggering enough to shadow the community for years to come. As has been pointed out, it was saved from utter blackness by the many and splendid evidences of fellowship which came from all over the continent, and conspicuously from the country whose "Stars and Stripes" today, on the far-away battle-grounds of Europe, float side by side with the old Union Jack, the flag of the Land of the Maple, and under whose united folds the great Anglo-Saxon brotherhood contend for the freedom which is their vital breath and native air

ALBUM OF THE RED CROSS SOCIETY OF JAPAN

Distinctive and Characteristic Features of the Japanese Red Cross Hospitals—Modern Equipment of These Institutions

In this issue is published a letter from Baron T. Ishiguro, the head of the Red Cross Society of Japan, which mentions an album of photographs of the buildings of the society. This album, quaintly bound and tied together



Fig. 1. The main gate of the Central Red Cross Hospital at Tokyo. See the Chinese characters on the fence posts.

with orange silk fringe in characteristic Japanese fashion, was sent to THE MODERN HOSPITAL, and a number of the pictures are reproduced with Baron Ishiguro's letter and with this article. The photographs are on the left-hand pages and one begins to look at them from the back end of the book first, and turns the pages backward until he reaches the last one on the front page.



Fig. 2. Hospital ship of the Japanese Red Cross.

A number of the photographs are of hospital exteriors. Each exterior has an architectural beauty of its own, far different from the square box-like architectural type of our occidental hospital buildings. Each hospital has lodge gates, most of which are surrounded by stone copings or

iron fences. See, for instance, Fig. 1, which shows the main gate of the Central Red Cross Hospital of Tokyo. Each has precise gardens and hedges, and, in some of the photographs, firs and pines with stripped trunks and spread-out, stunted tops are silhouetted black against the background of the sky or the building itself, as in the illustration on the front cover showing the hospital of the Akita Committee of the Red Cross.

Fig. 2 shows a hospital ship of the Red Cross. Several



Fig. 3. The nurses of the Central Hospital of the Red Cross Society of Japan learning Japanese etiquette.

group pictures show the directors, medical men and supervising nurses, taken in military formation, and one of them, which shows white-clad nurses on a field in stretcher-bearer practice, gives a perspective as accurate as the rungs of a ladder.

One of the most characteristic and interesting of the photographs is the one which shows a Japanese interior,

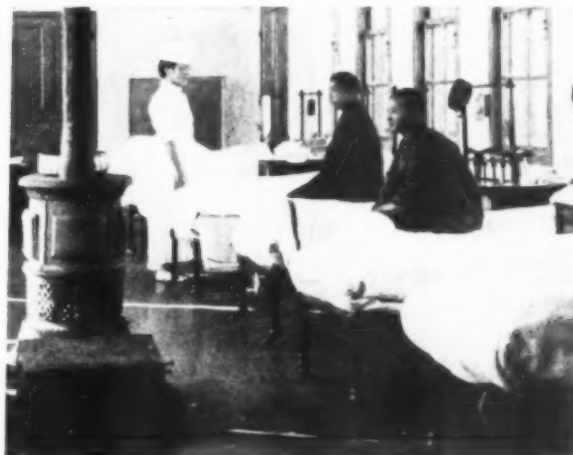


Fig. 4. A ward in the Central Hospital of the Japanese Red Cross at Tokyo.

matted floors and open shoji looking toward a garden, where the nurses, in their own native dress, are being taught Japanese etiquette (Fig. 3).

Some of the other photographs show completely equipped and orderly rooms for out-patient departments, radiographic laboratories, hydrotherapy, and pathological laboratories where each piece of equipment has its place and is in its place, and the bottles on the shelves are every one of them at an even distance from the bottle next in line.

The living room in a nurses' home is just like the same room in a nurses' home in this country. The character of

the picture differs only because of the uncorseted figures, oriental features, and high full caps of the nurses who make the home atmosphere of the picture.

The pictures of operating rooms show splendid interior construction, floors of large tiling, beautiful lighting for daylight and well-arranged artificial light for night work. There is the best of equipment in tables, standards and

and then go on again, and keep this up until someone forced her to stop.

Miss Nagano had come to this country to continue her hospital training after having some preliminary work in London. With her came another Japanese girl of higher rank who wished to take the nurse's training in order to return to Japan to teach native women in the hospitals there. The other had returned and Miss Nagano had stayed on as head nurse in the hospital after her graduation.

Her English was very literal. She used few adjectives, and never seemed to be able to assimilate our idioms or our slang. Her greatest pleasure was to go downtown to eat at an exclusive restaurant and to see a good play, and she would come home full of the wonder of it, and tell us all about her impressions in the most quaint and delightful way. When Miss Nagano had been to a play, everyone who could would gather around to hear about it.

One time one of the doctors and his wife had taken her to see Julia Marlowe play in "Romeo and Juliet," and when she returned she rehearsed the great tragedy, with her eyes shining and her breath catching as she told of Juliet, when she goes to the apothecary to get the sleeping potion, and the scene in the tomb. We were all

gathered around her, held breathless by the intensity of her description, when a passing nurse hailed her with, "Hello, Miss Nagano, did you have a good time?"

Miss Nagano's face clouded with anger for a minute as she answered, "How can you say good time, to see such sorrowful play?"

She was inordinately fond of pink roses and sweets; she said once, "Love pink roses so much, I guess maybe some day I sell my soul to devil, just for three little pink roses," and a plateful of fancy cakes would make her happy all through a hard day.

One day, some of us younger nurses bought some fancy French pastry cakes, and, watching our chance, put them on a table in her room when she was not there. That day, each of the guilty ones, as Miss Nagano quickly passed them by, received a kindly little pat on the shoulder, and this, "Some bad little smart bird put cakes on table, I eat all up, every crumbs."

She would often sit silent, after the work was done at night, for a long time, and wouldn't talk to anyone or answer questions. Once, at the beginning of one of these silent times, she said, "Must think now, nurse been naughty, can't get nurse off mind." Another time, when someone said, "A penny for your thoughts, Miss Nagano," her answer was, "My mind, my feet, my hands, here; my heart fourteen thousand miles away tonight in Japan." Another night she said, "Been very bad day, people very sick, some people die, no help. Day is done. Good Lord find some way through every day."

Miss Nagano finally went back to Japan to teach nursing, but not for long. She became homesick for America and returned here to the hospital, and while there contracted tuberculosis. The doctors thought that if she went back again to her native climate and food, she would stand a better chance of making a recovery, and so she returned to Tokyo and died there.



Fig. 5. Operating room in the Tsing-tau hospital.

steel dressing drums, and other accessories for good operating-room technic. Fig. 5 shows an operation in the Tsing-Tau hospital of the Red Cross.

The album of photographs surely shows that the Japanese Red Cross has splendid hospitals, doing scientific work, and that their hospitals have not lost their artistic national character or architectural beauty.

THE MEMOIRS OF A HEAD NURSE

I. A Japanese Nurse, Hisa Nagano—An Appreciation of a Wonderful Character*

Hisa Nagano was a little brown Japanese woman. Her hair was shiny and black, brushed straight back from her forehead, and done up in a little soft knot at the back of her head. Her face was quite scarred from an early attack of smallpox, and her eyes were so heavy-lidded that you seldom really saw them at all, except when she opened them to look straight at you, as she did when she talked to anyone.

In those days when I knew her, her position was not dignified by the name of assistant superintendent or superintendent of nurses, but she was known as the head nurse. She wore uniforms made of pink-and-white striped gingham, to distinguish her from the blue-and-white striped nurses. Her hands and feet were very tiny, but she possessed a power of endurance that was hardly comprehended by the Americans who worked with her. I have seen her, in strenuous times, when the hospital was crowded with patients and short of nurses, stay out of bed day and night and day and night again, lean against the wall once in a while and sleep on her feet for a few minutes,

*This is the first of a series of hospital sketches by a supervisor who has spent years in hospitals, in contact with the little comedies and tragedies and character-buildings afforded by life in a hospital.



Conducted by MISS ANNIE W. GOODRICH,
Teachers' College, Columbia University, New York City.

Please address items of news and inquiries regarding Department of Nursing to the editor of this department, Teachers' College, Columbia University, New York City.

The Consecration of the Nursing Profession*

By ANNIE W. GOODRICH, R.N., President of the American Nurses' Association and Inspector General of Nursing Service of United States Military Hospitals, Washington, D. C.

Members of the American Nurses' Association:

We have come together in the most momentous period, not in the history of this country alone, but in the history of the world, to consecrate ourselves anew to the service of humanity through our chosen profession. No other purpose would justify our turning for the briefest moment from the various fields the demands of which, not less in one field than in another, cannot today be adequately met.

As, in our desire to render our fullest service, we fix our eyes upon the overwhelming tragedy into which the world is plunged, and in some measure is borne in upon us its unutterable anguish and despair, its superb endurance and renunciations, and its marvelous scientific achievements in the destruction and reconstruction of the work of God and man, how infinitesimal, how almost inconsequential and trivial, does any individual contribution seem! But, even as the tiny mountain streams, growing ever and ever mightier in their consolidating strength, find themselves at last in a vast ocean through which they present an overwhelming force, so our puny individual efforts, through unification of purpose becoming a greater and greater factor in the conservation of human life, have merged into an army that has been called to take its place with the greatest army that has ever been brought into existence. For the first time in the history of our country a division of women is included in the military establishment in an almost definite ratio to the number of men: one million men, 10,000 nurses; four million men, 40,000 nurses. Upon this body, whose function is the conservation of life not less than the body whose function is its destruction, is imposed a service that no personal sense of inadequacy permits of escape. Such service as can be rendered must be rendered by every member of our profession today so that, through the forceful hands of men and the healing hands of women, a purified world may be prepared for the generations that are to come.

It is therefore our highest duty, during the few days when, gathered together from all parts of the United States, we meet for the consideration of each aspect of the situation in which we are involved, to prepare a program of work that looks to the most far-reaching results in every field; that leaves no stone unturned to treble, not alone in numbers but in efficiency, our nursing strength.

*President's address, American Nurses' Association, Twenty-first Annual Convention held at Cleveland, Ohio, May 7 to 11; presented here by courtesy of the *American Journal of Nursing*.

Through simple and effective organization we must make it possible to carry to the most remote corner of each state our message to every member, that each and every member may make her full contribution of nurse power. Our reorganization was indeed timely; the effect of the national organization to decentralize, throwing back upon the state the burden of its responsibility, is in strict accord with the policy of the Federal Government and is in contrast to the policy pursued at the time of the Civil War in such matters as the draft and other similar measures. Little did those whose vision brought these great associations of ours into such early existence, providing them with an official place, dream of the public service they would be called upon to, and through such means only, could effectively render.

Through ever closer and closer cooperation with all sister organizations must the woman power of the country, so increasingly great, be brought to strengthen our hands, so overfull and still so pitifully weak. Ours is essentially a woman's problem and, therefore, theirs to understand and aid. To the institutions of higher education already responding to our needs must go a stronger and more far-reaching appeal that the interest of our girls be aroused, not alone to the dramatic element of the nursing field at this time, but to the great verities of its service to civilization, its potential contribution to the happiness of the race through the conservation of its health, its potential contribution to its spiritual and mental development so dependent on the normal body, the part it may play in the diminution, or even the eventual abolishment, of those institutions that are as much monuments to the defects of our social state as are our institutions of learning and religion to its virtues—our institutions for dependents, for incurables, our prisons, penitentiaries and jails, whose heavy doors have closed and are still closing not only on the men and women victims of our social system but on the children, blotting the sunshine out of lives that can only reach an efficient maturity through its rays. Of whom should we expect a more penetrating vision, a broader social interpretation, than those in whose hands is placed the shaping of the thought and, through the thought, the lives of the citizens of tomorrow and those whose thoughts have been so shaped? I should not think that there would have to be a war to call our students to the nursing field or to make faculties perceive its social values. Inspired by visions of usefulness, equipped with sounder tools through which to reach their goal, these nurses of tomorrow should break down walls that we of today have never tried to scale. There is another group that we must reach and make our call ring in their ears—for their own sake not less than for the sake of those who need their services—the young women who, through the fortune of environment, are not compelled to earn their daily bread—until they take their place beside their sisters who have always toiled, sharing in their renunciations, and rendering a service so complete that they shall not suffer the after smart of undeserved applause, but shall reap the benefits that accrue to those who have demanded of themselves a full conformance to the requirements for a chosen field. And lastly, ourselves—what is our program for ourselves—the army of trained workers called to the side of these men, picked men, men that it was planned, or so we thought, should build through years of healthy, happy manhood our democracy? Never in our history have we been so under fire, never perhaps again will there be such a period of testing. With all the strength we have, with all the undreamed-of strength we can summon, in every manner of which we can con-

ceive, through every avenue of service we can find, we should seek to raise the standard of nursing so immeasurably above the service rendered in all previous wars, in the military field of today, in civil life, that, after this ghastly struggle is over, freed, through a record of high service, from commercial uses, the hamperings of social prejudices, the limitations of inadequate preparation, our profession may contribute in fullest measure to the restoration of this crippled, scarred humanity. *This is our sacred legacy of labor from the young fathers of the country that their supreme sacrifice may bear fruit through a fair, unblemished manhood of tomorrow.*

I wish, if it would make my message stronger, that I might have come to you with knowledge gained first hand, not alone from our camps of preparation, but from those under fire; but what I have seen leaves me in doubt as to our attitude or action at this time whether as part of the military establishment or serving our country through some other field. And in my conception of this service, the military system plays no small part. In this establishment we have, through the unification of forces, a body of labor that gives the greatest return in the shortest period of time, a system of control and direction that establishes simply and incontestably the authoritative voice. Its demand that all accessories that consume space, time, or thought that are not needed for its own designs shall be abandoned, commands a maximum of individual service. Through it was achieved the greatest engineering and sanitary feat of the century, if not of the ages. However short it may have fallen of its own or the communities' desired achievements, at this time its great accomplishments already justify its methods and commend its system for situations where concentrated effort and concerted action are required.

The official bulletin for April 8, reviewing the first year of America's participation in the war, states: "The outstanding feature of the first year of war has been the sudden transformation of America's young and able manhood into an army that today numbers 12,380 officers and 1,528,924 enlisted men, whereas one year ago today the total actual strength of this uniform force was but 9,524 officers and 202,510 enlisted men." Gathered from every walk in life and accustomed to an individuality in thought and action, through citizenship under a government that has not heretofore expressed itself in terms of autocratic control, this great army is uncomplainingly learning its rapid and rigid lesson in the subordination of self to the machine. For it, and in no small measure through it, plains have been converted into cities, and great hospitals, scientifically equipped, have arisen almost overnight. Here we have been called to take our place, but with no stern exactions, rather with all the considerate thought that could be given in this time of stress and strain, and to render not a new and unchosen service, but one of our own election. In order that we may discharge our tasks, more heavily weighted with responsibility than appears on the surface, we are asking the device whereby authority in the military system is universally recognized. It should be given us, it has not been denied. Its accordance may mean a conformance to its customs and traditions not hitherto required. I think such conformance should require no military action. Is it too much to ask, I wonder, that we who have seen life at such close range, who have been privileged to come close to its great truths with all its foolish trappings stripped away, should of our own accord demand of ourselves a strict observance of these military customs so that, in every way, we shall promote and not retard the efficiency upon which so much depends? Is it too much

to require ourselves that, as long as this war lasts, we conceive of our service, wherever it is rendered, as our recreation and our recreation as a service that we will not now endure? Such an attitude of mind would find no hours too long to devote to the accomplishment of its self-imposed tasks; no heretofore diversion would have power to attract, and no time and space consuming customs of dress be tolerated. The service to be rendered by our profession in these great camps, even as in our cities, is limited only by the vision of those who perform them, and nursing procedures are not the only items in the list. With minds purged of all selfish interests, intent alone upon the consummation of a gigantic task, let us perform our part. The manhood of our country has been called to undergo a testing not less cruel and searching for soul and mind than body; are they to emerge triumphant helped by our hands or hindered by our presence? Pray God that in this crisis of the nations we nurses may not fail.

Let us, therefore, tonight consecrate ourselves and our service anew for all the days, the months or years, if need be, of this great struggle even as that master voice, who, too, learned of life "from the inside," has consecrated his song:

"To the men of the tattered battalion which fights till it dies,
Dazed with the dust of the battle, the din and the cries,
The men with the broken heads and the blood running into their eyes.

"Not the ruler for [us] but the ranker, the tramp of the road,
The slave with the sack on his shoulder pricked on with the goad,
The man with too weighty a burden, too heavy a load.

"Others may sing of the wine and the wealth and the mirth,
The portly presence of potentates goodly in girth:
[Ours] be the dirt and the dross, the dust and the scum of the earth.

"Theirs be the music, the color, the glory, the gold;
[Ours] be a handful of ashes, a mouthful of mold.
Of the maimed, of the halt and the blind in the rain and the cold."¹

To these shall our service be rendered. Amen.

Report of the Nursing Resources in the State of New York as of November and December, 1917

By MARIE LOUIS, Chairman, General Committee on Census, New York State Nurses' Association.

At the request of the General Medical Board of the Council of National Defense, the New York State Nurses' Association authorized a census and survey of the nursing resources in the state of New York. The purpose was to determine the number of individuals who were engaged in the different classes of nursing service, as well as in the broader divisions of nursing specialties. The results of such a survey would then give a definite basis in planning the organization of nurses for war emergencies, both at home and abroad, and, further, would show definitely where nurses are needed most, thus enabling us to direct women who wish to enter the nursing field as a patriotic service to those sections of the state.

The method of procedure was similar to that used by the nursing committee of the Mayors' Committee of Women on National Defense during the summer of 1917.

Although there are fifty-seven counties in the state outside of Greater New York, only forty-two chairmen were appointed, some counties being small enough to be combined under one director; several chairmen had as many as three counties, while the majority had only one. The census of one entire county and parts of two others was taken through this office.

¹A Consecration, by John Masefield.

The four types of questionnaire forms were provided by the American Nurses' Association, and all other stationery, envelopes, authorization forms, directions as to "How to Make the Census," and all individual record cards were furnished by the New York State Nurses' Association.

Some of the problems that presented themselves in the actual process of taking the census in the state were very different from those found in New York City. The inaccessibility to the many small towns and townships, inability to reach these by telephone, the lack of proper organizations, such as registries, etc., through whose agency groups of nurses can best be reached, as well as the busiest season of the year, probably account largely for the fact that the work of the census has extended over a period of four months, and is even now not so complete as we should like.

Two counties reported no nurses, and in two the work

is so delayed that the census of these cannot be included in the general total.

Many new and original methods were brought into use by progressive county chairmen. Publicity through newspaper articles and notices was probably one of the most efficient means in bringing the unattached nurses to register. Many druggists in country districts and doctors in small towns gladly gave their cooperation in sending names of nurses registered with them. In many sections where we expected difficulties we had splendid assistance, and the Chautauqua School of Nursing as well as the National School for Certified Nurses sent complete lists of their graduates in the state.

A statistical report has been made out showing the nursing resources, all institutions, and organizations, by counties, which may serve as a guide for officers recruiting nurses for the Red Cross. In this report, however, only the collective results are given.

TABLE A.—NUMBER OF ORGANIZATIONS RECEIVED AND NUMBER OF NURSES SO EMPLOYED OR REGISTERED

	No.	Nurses so employed	Percent total
Registered and accredited hospitals.....	90	6,032	37
Unregistered hospitals and sanatoriums.....	105	1,187	7
Homes and orphanages.....	61	412	3
Registries, commercial.....	31	1,788	11
Registries, non-commercial.....	37	1,974	12
Alumnae of registered hospitals.....	62	4,059	24
Alumnae of unregistered hospitals.....	2	273	2
Public health organizations.....	64	522	3
Total.....	442	16,247	100

There are more alumnae and nursing organizations than indicated above, with a corresponding increase in membership. In weeding out duplications in counties, some chairmen thought it would be confusing to return questionnaire of alumnae membership whose nurses had already been recorded in registries, hospitals, or public health organizations; hence the number in the table, 4,059, is really no true indication of the membership in nursing organizations. The 90 registered hospitals employing a total of 6,032, 37 percent of total, include eleven state hospitals, the personnel of which is 2,596. The 105 unregistered hospitals and sanatoriums employ only 1,187, or 7 percent of total;

homes and orphanages the small number of 412, or 3 percent.

The most astonishing fact is that the state of New York has only very few nurses engaged in the important field of public health service, 522 in all, in comparison to 1,391 doing this work in New York City. Fifty percent of the entire total are employed in private nursing.

Although all duplicates had been removed in the individual counties, considerable elimination was still necessary, some graduates being claimed in as many as four counties. The final count showed a total 15,870 nurses distributed over the several groups as shown in Table B:

TABLE B.—INDIVIDUALS GIVING NURSING SERVICE ACCORDING TO THEIR STATUS

Total	Graduate nurses	Reg. nurses	Red Cross	Not reg. nurses	Pupils	Tr.	Attendants	Prac. Nurses
15,870	6,993	3,888	808	3,101	3,076	1,316	In tr. 587	3,898

Considering these numbers in relation to the population, we find that three persons in every thousand per population give nursing service. Greater New York showed the

same ratio. However, there is a marked difference in the status of the nurses.

TABLE C.—RATIO TO POPULATION OF VARIOUS CLASSES OF NURSES

	Per 1000
Population of New York State (1915 census).....	5,309,557
Number of individuals giving nursing service.....	15,870
Graduate nurses.....	6,993
Registered nurses.....	3,888
Pupils.....	3,076
Practical nurses and attendants.....	5,801

Only about 40 percent of the entire total are graduate nurses, and only a little over half of these are registered.

Table D shows the branches in which these are employed.

TABLE D.—BRANCHES IN WHICH NURSES ARE EMPLOYED

	Graduate nurses	Reg. nurses	Red Cross	Not reg. nurses	Percent Red Cross	Percent R.N.
Total number.....	6,993	3,888	808	3,101	21	54
Institutional.....	1,705	816	142	889	18	50
Public health.....	268	237	44	31	19	98
Private nursing.....	2,519	2,565	191	954	12	60
Unspecified.....	2,401	1,270	282	1,227	22	50
In service (Red Cross).....			149		18	

The entire total of graduates is 6,993; of this number 3,888, or 54 percent, are registered; 808, or 21 percent, of

these are Red Cross nurses. The graduates employed in hospitals number 1,705; of these 816, or a fraction over

50 percent, are registered; 142, or 18 percent, are Red Cross nurses. Of the 268 employed in public health specialties, 237, or 98 percent, are registered; 44, or 19 percent, of these are Red Cross nurses. Of the 2,519 nurses registered for private nursing, over 60 percent are registered, and 191, or 12 percent, are Red Cross nurses. The group listed as "unspecified," the majority of which are probably in the private duty field, totals 2,401; of these 50 percent are registered, 282, or 22 percent, are Red Cross

nurses. Of the entire total of Red Cross nurses, 149, or 18 percent, are in active service.

NURSES EMPLOYED IN PUBLIC HEALTH SERVICE

Through the courtesy of Dr. Biggs of the state board of health and Miss Bridgeland of the Metropolitan Life Insurance Company, complete lists of nurses specializing in public health work were received, totaling 522. These are distributed over the fields shown in Table E.

TABLE E.—DISTRIBUTION OF PUBLIC HEALTH NURSES

	Registered	Not registered	Practical
General visiting nursing.....	42	9	54
Infant welfare.....	5	4	1
Industrial nursing.....	8	1	14
Social service.....	8	1	0
School nursing.....	60	5	9
Tuberculosis.....	27	4	20
Metropolitan Life.....	18	19	2
Maternity.....	0	0	104
Miscellaneous.....	49	8	51
Total.....	217	50	255

Grand total—522 public health nurses.

The public health questionnaire and individual record cards received from counties totaled only 427. This discrepancy is no doubt due to the fact that some counties are incomplete and in some information was unobtainable.

The twelve state hospitals, eleven of which are registered, employ a total of 2,596 persons to care for those who are mentally ill. Table F gives this personnel according to status.

TABLE F.—NURSING PERSONNEL OF THE TWELVE STATE HOSPITALS

Total number	R.N.	Red Cross	Not R.N.	Pupils	Tr.	Attendants	In tr.
2,596	109	9	555	309	1,125		498

A study of this table shows that only 109 of the entire personnel are registered nurses, 9 of these being Red Cross nurses. Five hundred and fifty-five are graduates who probably are not eligible for registration, and probably only a small number of the 309 pupils qualify educationally for registration on graduation.

The 1,125 trained attendants are those who have received the specified three months' course in state hospitals, and 498 are receiving this instruction. This makes a total of 2,596, or 15.5 percent of the entire total, giving nursing care to the mentally ill.

The most salient feature that the census has brought to light is the small number of Red Cross nurses compared to the total number of registered nurses. The official Red Cross list was received from the Red Cross district chair-

men and on February 1, 1918, numbered 808; of this number 149 are in service and about 50 are organized on base hospital units. This number is barely 21 percent of the entire total of registered nurses.

We are anxiously looking to the registered hospitals to help swell the ranks of the Red Cross with their large body of well-trained young women, patriotic and zealous to serve. And so the directors of nurses in these hospitals have been urged to direct their outgoing seniors, especially those who are best fitted for the work, in the army and navy service.

Table G shows the total pupil nurse staff enrolled, the number graduating in 1918, and the number that can be admitted during the year.

TABLE G.—TOTAL PUPIL NURSE STAFF ENROLLED AND NUMBER THAT CAN BE ENROLLED

	No. inst.	Total enrolled	Graduating 1918	Enrolled fall 1917	No. that can be enrolled
Registered and accredited hospitals.....	90	2,769	857	1,022	1,316
Unregistered hospitals.....	24	307	135	102	186
Total.....	114	3,076	992	1,124	1,502

The results shown in Table G seem most encouraging. At least 50 percent, or 500, of those graduating can be made available for war service. The large number, 1,124, enrolled in the fall of 1917 clearly shows that the interest of young women has been directed toward the nursing field. It is now up to the nursing profession to see that the schools of nursing secure their full quota of students

for the year and to the hospitals to increase their facilities so as to accommodate as many more.

The trained attendants, attendants in training, and practical nurses form over 33 percent of the entire total of individuals giving nursing service in the state. Table H shows these classes.

TABLE H.—TRAINED ATTENDANTS, ATTENDANTS IN TRAINING, AND PRACTICAL NURSES

Total	Men	Trained Women	Men	In training Women	Men	Practical Women	Certified nurses	Corresp. nurses
5,801	583	763	261	326	137	3,198	283	280

A study of how this class is occupied shows that 1,623 attendants and attendants in training are employed in state hospitals. Fifty-three attendants are registered in registries, leaving only 227 employed in other institutions. Practical nurses are more widely distributed, and a comparatively small number only are employed in institutions

and public health organizations. There are 996 listed in registries for private nursing, leaving many hundreds that are working independently throughout the state.

The graduates of the Chautauqua Correspondence School and the National School for Certified Nurses are also largely employed in private nursing.

COMBINED CENSUS OF GREATER NEW YORK AND NEW YORK STATE

TABLE 1.—NUMBER OF INSTITUTIONS CONCERNED WITH NURSING SERVICE IN NEW YORK STATE

	Greater New York		New York State	Total	Number of persons giving nursing service		Total
	No.	No.			Greater New York	State	
Registered and accredited hospitals.....	56	90	146	5,303	6,032	11,355	
Unregistered hospitals and sanatoriums.....	123	105	228	2,700	1,187	3,887	
Homes, orphanages, etc.....	53	51	104	129	412	541	
Registries, commercial.....	31	31	62	3,252	1,788	5,040	
Alumnae registered hospitals.....	52	37	89	3,447	1,974	5,421	
Alumnae unregistered hospitals.....	51	62	113	7,279	4,059	11,338	
Public health organizations.....	10	2	12	321	273	594	
Other nursing organizations.....	125	64	189	1,391	522	1,913	
Total.....	20	0	20	4,934	0	4,934	
Net total after elimination of duplicates in New York City file.....							45,005
							33,247

Table 1 shows the number of institutions training nurses, with nursing service in the entire state, with their personnel, unregistered hospitals, and other organizations concerned.

TABLE 2.—TOTAL NUMBER OF INDIVIDUALS GIVING NURSING SERVICE

New York City.....	17,377
New York State.....	15,870
Total.....	33,247

TABLE 3.—POPULATION AND NUMBER PER THOUSAND GIVING NURSING SERVICE IN THE ENTIRE STATE

		Per 1,000 population
Population of New York State.....	10,336,778	
Total number individuals giving nursing service.....	33,247	3
Total number graduates.....	17,301	1.6
Total number registered nurses.....	10,347	1
Total number pupil nurses.....	6,115	.5
Total number attendants.....	3,155	.3
Total number practical nurses.....	6,676	.6
Total.....	33,247	

TABLE 4.—GRADUATE NURSES IN THE STATE AND THE FIELDS IN WHICH THEY ARE EMPLOYED

Type of work	Graduate nurses	Reg. nurses	Not reg. nurses	Red Cross
Institutional.....	4,250	2,558	1,962	483
Public health.....	1,328	1,214	214	222
Private nursing.....	5,701	3,267	2,434	1,322
Unspecified.....	5,752	3,308	2,349	482
Total number.....	17,301	10,347	6,959	2,509

It has been estimated that 600 of Greater New York's nurses of the state, there are now a total of 749 nurses. Red Cross nurses are in active service, and, with the 149 in active service.

TABLE 5.—PUPIL NURSES IN CLASSES

	No.	New York City	New York State	Total
Total enrollment in registered hospitals.....	146	2,746	2,769	5,515
Total enrollment unregistered hospitals.....	41	293	307	600
Total.....	187	3,039	3,076	6,115

TABLE 6.—PUPILS GRADUATING 1918

	New York City	New York State	Total
Pupils graduating 1918.....	827	992	1,819

Fifty percent or more of these will be available for Red Cross service.

TABLE 7.—PUPILS ADMITTED DURING THE FALL OF 1917 AND THOSE THAT CAN BE ADMITTED DURING 1918

	New York City	New York State	Total
Admitted fall of 1917.....	1,000	1,124	2,124
Can be admitted 1918.....	1,836	1,502	3,338
Total.....	2,836	2,626	5,462

TABLE 8.—ATTENDANTS, PRACTICAL NURSES, CERTIFIED NURSES, AND CORRESPONDENCE NURSES

	New York City	New York State	Total
Attendants.....	1,252	1,903	3,155
Practical nurses.....	2,778	3,335	6,113
Certified nurses.....	0	283	283
Correspondence nurses.....	0	280	280
Total.....	4,030	5,801	9,831

AIDS

Returns from Red Cross Chapters showed that in all 5,811 women had taken the courses in elementary hygiene or home care of the sick throughout the state.

	New York City	New York State	Total
Aids.....	1,872	4,139	5,811

Considering the combined nursing resources of Greater New York and New York State, the outlook is most encouraging and with the efforts now being made on the part of hospital trustees and superintendents to increase the

housing facilities, admit non-residents, and shorten courses for college women, it would seem hardly necessary to lower the standard in order to meet the present crisis.

The young women of the country are eager and anxious to become nurses, in this way giving practical expression to their patriotism. It is clearly the duty of the public, as a national service, to provide the best possible means to fit them for this work.

There have been many doubting Thomases questioning the final value of the census. I am, therefore, glad to

say that even the uncompleted results have already been used by recruiting officers. The questionnaire, particularly those of the alumnae associations with the names and addresses of their presidents and their membership, will serve as a point of contact in recruiting, and will furnish ready data to the state nurses' association. Aside from this we have the satisfaction of knowing, to some degree, what nursing resources the state has.

I am greatly indebted to the central committee for its support, particularly to Miss Goodrich for her helpful advice and assistance in doing the work of the census, and the privilege of using the office of the nursing committee for three months without cost to the association.

I am most grateful to the many busy nurses throughout the state who gave so generously of their time and money for the census.

The New York State Defense Council through its county chairmen has been of great help to the chairmen taking the census, and it is hoped that a permanent relationship may be established between the two bodies, thus strengthening the defenses of the country.

I am glad to have had the privilege of assisting with this piece of work. The knowledge and experience gained and the many cordial and interesting women met through correspondence have made the most discouraging experiences worth while.

A list of the chairmen who directed the census in the counties and their respective committees is appended.

CENTRAL COMMITTEE ON CENSUS

Mrs. William Grant Brown, Chairman, New York State Defense Council.

Miss Elizabeth Golding, President, New York State Nurses' Association.

Miss Annie W. Goodrich, President, American Nurses' Association.

Miss Carolyn E. Gray, President, New York League for Nursing Education.

Mrs. Anna Hanson, President, New York State Public Health Nurses' Association.

Miss Mary Adelaide Nutting, Professor of Nursing and Health, Teachers' College, Columbia University.

Miss Carolyn Van Blarcom, Director Red Cross Nursing Bureau, Atlantic Division.

Publicly Supported Hospitals Not Subject to Penalty for Coloring Oleomargarine

In March we called attention to the penalty imposed by law on hospitals and other public institutions which color oleomargarine for the use of patients or employees. We are in receipt of a communication from the office of the Commissioner of Internal Revenue in response to an inquiry from a municipal hospital, which declares that "this office has held that a state, county, or municipality in the exercise of its governmental functions, maintaining institutions for the custody and care of those persons coming under its control, may add artificial coloring to oleomargarine served to inmates, patients, or prisoners, without incurring liability as manufacturer under the Act of August 2, 1886, as amended, provided these institutions are supported solely by the government controlling them.

"Should any of the product colored be served to employees or other persons for compensation or consideration, liability as manufacturer would be incurred."

Hospitals not entirely supported by public funds, however, are subject to the full penalty of the law if they color oleomargarine served on their tables. The value of these artificial substitutes for butter is discussed in the Department of Dietetics this month. It is unfortunate, especially now that there is such urgent need for use of all the edible fats, that popular prejudice should place these products at disadvantage.

PUBLICITY THAT PAYS

One of Several Bulletins Published by the Montreal General Hospital—The Human Interest Story at Its Best—A Hint to Other Hospitals

A young French-Canadian ran up the steps of the Montreal General Hospital, his face wreathed in smiles. The doorkeeper stopped him for an instant, asking him whom he wished to see, and the lad laughed. "Everybody," he said, hurrying on as if the place belonged to him. "I guess I'm known here all right."

In the hall, he just avoided a collision with an exceedingly grave-looking surgeon in the usual white dress of the hospital, whose face slowly reflected one of the boy's own smiles as he looked at the intruder. "What, you here, you young scamp," he said, "and what are you doing here?"

"Just looked in to pay my respects," grinned the boy. "This is kind of 'home' to me."

As a matter of fact, it was the boy's only home. Utterly friendless, he had first entered the "General" many years ago, afflicted with empyema of the lung. It was an exceptionally bad case, and one operation followed another, until the boy's life seemed to be spent between the operating theater and the surgical ward. Through it all, in pluck and good humor, he was a veritable object-lesson, and endeared himself to nurses and doctors alike. At last, with a hole beneath his heart that a man could thrust his fist into, where several ribs had been removed, the young French-Canadian was able to climb out of his hospital bed for the last time and play the part of an active but very small pawn in the game of life.

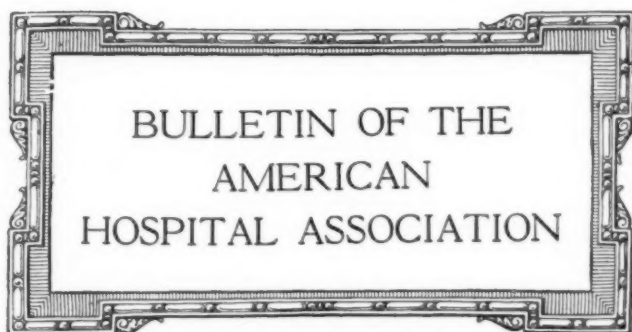
The General Hospital clothed him, paid for his board, and for two summers had him sent to a convalescent home and exercised an almost parental interest in his welfare. It helped him later to find light employment, and today not only is he able to keep himself, but this year he expects to save \$40, and to put it in the bank "against old age."

His work sometimes takes him away from Montreal for a season at a stretch, but as soon as he returns to the city he loses no time in paying a visit "home," i. e., to the General Hospital, where he is sure of a welcome and of the kindest interest in all his doings.

For the work of the "General" does not end with curing its patients. Many, on the point of discharge, are found to be friendless and destitute, some even lacking clothes with which to go out into the streets. Crutches and surgical appliances are required by others who have not the wherewithal to buy them. All such cases are dealt with by a special department, for one of the aims of the hospital is to give those who need it a new start in life, even to find them employment, and to mend not only the body but the circumstance of all deserving cases.

This is a great work, when it is remembered that some four hundred patients are treated every day in the wards, and as many again in the out-patient department, representing a total of 273,551 days of treatment last year. Those who help this work, either by subscription or by personal labor, sign their names to one of the worthiest and most necessary undertakings carried out in the city.

Bids have been received during the last month for the construction of the Miller Hospital, at St. Paul, Minn. By the will of the late Martha A. Miller, \$1,000,000 was left for the establishment and maintenance of this institution, and it is reported that approximately \$500,000 will be expended in its erection.



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WILLIAM H. WALSH, M. D., Secretary.

Hospital and Medical Treatment of Injured Civil Employees of the United States

By JOHN W. TRASK, M.D., Medical Officer, U. S. Employees' Compensation Commission, Washington, D. C.

There was passed by Congress and approved by the President, September 7, 1916, a law entitled "An Act to Provide Compensation for Employees of the United States Suffering Injuries While in the Performance of Their Duties and for Other Purposes." The law provides for compensation in case of personal injury sustained by employees while in the performance of duty. If the disability for work is of longer duration than three days, compensation is paid for loss of wages. For an injury sustained by an employee in the performance of duty, and whether or not there is any loss of time from work, the employee is entitled by the terms of the law to receive "reasonable medical, surgical, and hospital service and supplies."

For the purpose of the administration of the act, the law created a commission composed of three members and known as the United States Employees' Compensation Commission. The office of the commission is located in Washington.

The fundamental purpose of the law is to repair, in so far as is possible, the damage imposed upon employees by the hazards of industry, to restore injured employees to industry unimpaired where this can be done, and to compensate employees in part for such loss of earning capacity as results from injury. Much of the work of the commission is therefore a question of medical, surgical, and hospital treatment.

The responsibility of the commission under the law may be construed as not only that of furnishing to the employee medical and hospital treatment, but that of furnishing, so far as it is available, that treatment which will be the most effectual in repairing the damage due to injury and of restoring the employee to industry.

The law provides that medical and hospital treatment shall be furnished where practicable by United States medical officers and hospitals, but that, where United States medical officers and hospitals are not available, treatment shall be furnished by private physicians and hospitals designated for the purpose by the commission. Section 9 of the law, which is the principal one relating to this aspect of the subject, is as follows:

"Sec. 9. That immediately after an injury sustained by an employee while in the performance of his duty, whether or not disability has arisen, and for a reasonable time thereafter, the United States shall furnish to such employee reasonable medical, surgical, and hospital services and supplies unless he refuses to accept them. Such services and supplies shall be furnished by United States medical officers and hospitals, but where this is not practicable shall be furnished by private physicians and hos-

pitals designated or approved by the commission and paid for from the employees' compensation fund. If necessary for the securing of proper medical, surgical, and hospital treatment, the employee, in the discretion of the commission, may be furnished transportation at the expense of the employees' compensation fund."

The problem of arranging for adequate and competent medical and hospital treatment is not a simple one. Civil employees of the United States are at work in all parts of the country, even to the smallest hamlet which has its post-office. Not only this, but there are also the field parties doing work in uninhabited or sparsely settled localities, far removed oftentimes from any hospital and frequently even from any physician. The work of civil employees varies from construction work in the building of powder plants and shipyards, and the varied manufacturing work of arsenals and navy yards, to the work of clerks in the departments at Washington, the post-office employees throughout the country, including letter-carriers and those serving rural routes, those engaged in the various activities of the Department of Agriculture, including field parties and forest rangers, and those engaged on projects of the Reclamation Service.

The commission was not organized for some time after the enactment of the law. It is now engaged in extending its arrangements throughout the country for furnishing adequate medical and hospital treatment for injured employees. It is endeavoring to make arrangements where possible with well-equipped, well-managed hospitals, hospitals of such standing that there can be no question but that injured employees will receive adequate treatment. The arrangements are being made with hospitals wherever possible instead of with physicians, because the hospital, in addition to furnishing hospital housing and nursing facilities, makes available a group of specialists, a group of men competent to handle injuries of all kinds, injuries requiring the orthopedist, the surgeon, the ophthalmologist, the roentgenologist, and the internist. In localities where there are no satisfactory hospitals, arrangements will be made with one or more physicians in each locality, preferably physicians having some experience in surgery, or particularly with that class of accidents and injuries which constitute much of the work of what we have come to term the industrial surgeon. The commission feels that, in the interests of the employee and because of its responsibilities, its arrangements with hospitals and physicians must be of such a nature that there can be no question of their competency or adequacy. It feels that it should and can, on the whole, place at the disposal of the injured employee better medical and hospital facilities, i. e., better in so far as their efficiency in the repairing of the injury is concerned, than the employee would usually be able to obtain if seeking treatment of his own initiative and at his own expense.

Medical and hospital services are necessarily of such an unstandardized nature that the question of going into the market and purchasing these commodities is one possessed of difficulty. The commission presumably can pay for what is necessary or essential for the recovery of the employee, but is not justified in paying for things unessential to such recovery, nor is it justified in paying the prices for work that are often obtained by specialists of wide repute—prices that from the point of view of the specialist are entirely justified in that he, in many instances, can occupy his time fully with those able and willing to pay his charges. On the other hand, the commission cannot accept gratuitous service. The work of the commission is not charity, nor are the injured employees

in any way charity patients. Their treatment is a right established by the law of the land. The charges, so far as hospitals are concerned, need be associated with little difficulty. A hospital can readily ascertain what it costs it to care for patients. Every hospital knows its cost per patient per day. Most hospitals know the general cost per patient per day and also the cost per room patient per day and per ward patient per day. It is a simple matter, therefore, for hospitals to establish a "cost plus" basis for charges.

The law provides that treatment of injured employees shall be furnished by United States medical officers and hospitals wherever these are available. The principal medical officers and hospitals available for this work are the hospitals and medical officers of the United States Public Health Service. These are located, chiefly, in the seaports and lake and river ports. In other localities special provision has to be made and, as provided by the law, physicians or hospitals designated for the purpose.

The commission has been sending to general hospitals a letter and schedule, copies of which are shown herewith. The purpose of sending these is to ascertain what hospitals are willing to care for injured civil employees and what their respective facilities are. With the information thus furnished it will be possible to designate hospitals where available pursuant to Section 9 of the Compensation Act. In this work material assistance has been rendered by Maj. W. H. Walsh, M. O. R. C., secretary of the American Hospital Association, and by the Medical Section of the Council of National Defense through Dr. Robert L. Dickinson.

If any hospital which feels that it is suitably equipped to furnish adequate treatment such as is desired fails to receive such a schedule, one can be obtained by making request to the Employees' Compensation Commission, Washington, D. C.

COPY OF LETTER SENT OUT BY THE UNITED STATES EMPLOYEES' COMPENSATION COMMISSION

"The Federal Compensation Act of September 7, 1916, provides that civil employees of the United States injured while in the performance of duty shall be given medical, surgical, and hospital treatment. See Section 9 of the Act, copy of which is inclosed herewith.

"The responsibility of furnishing this treatment falls upon this Commission. The Commission feels under obligation not only to furnish treatment, but, in the interest of the employee, to furnish that treatment which will best restore him to his former efficiency. For this reason it is found advisable to become acquainted with the management and facilities of one or more hospitals in each locality where there is any considerable number of Government employees to which injured employees may be sent.

"If you will be willing to have injured employees entitled to treatment under the Federal Employees' Compensation Act cared for in your hospital, will you please fill out the inclosed schedule and return it to this Commission.

"It will be noted that the schedule provided for the statement of charges contains paragraphs Nos. 1 and 1A for statement of charges for hospital patients. A rate covering the items included in paragraph No. 1 is preferred by the Commission, if it can be given. Paragraph No. 1A is provided as an alternative, in case the hospital finds it impracticable to give a rate as provided in paragraph No. 1.

"Injured employees are to be quartered in the general hospital wards. These patients are in no wise charity patients, but according to Act of Congress are entitled to reasonable medical, surgical, and hospital service to be paid for from a fund provided for the purpose. It is suggested that charges based upon the general hospital cost per patient per day would be reasonable.

"It is assumed that the charges for medical and surgical service will not be greater than would be charged pa-

tients of a similar economic status who were paying for their own treatment."

HOSPITAL SCHEDULE

For the period ending June 30, 1919.

To be returned to the United States Employees' Compensation Commission, Washington, D. C.

The.....Hospital, located at.....in the city of....., state of..... will furnish hospital service to injured civil employees of the United States presenting credentials showing that they are beneficiaries of the Federal Employees' Compensation Act.

INFORMATION REGARDING HOSPITAL

Are the general wards used exclusively for charity patients?.....
Are the general wards used in part for charity patients?.....
Can injured employees be cared for in the general ward?.....
Can medical and surgical treatment be furnished by the hospital?.....
If medical and surgical treatment can be furnished by the hospital, by whom will this be given? Will it be given by the visiting staff or resident physician?.....
Can the hospital furnish out-patient or dispensary treatment to injured employees not requiring residence in hospital?.....
What is the capacity of the hospital? Number of beds.....
What special facilities or equipment, if any, has the hospital?.....
Has the hospital the following services: Medical?.....
Surgical?.....; Orthopedic?.....; Ophthalmological?.....
Neurological?.....; Contagious?.....
Has the hospital a clinical laboratory?.....
Is there a trained pathologist in charge?.....
Are case records kept of all hospital patients?.....
Of dispensary patients?.....
Has the hospital an x-ray department?.....
Is there a trained roentgenologist in charge?.....
Has the hospital interns?.....How many.....
Has the hospital paid resident physicians or surgeons?.....
Has the hospital an out-patient or dispensary department?.....
Is it open daily?.....What hours is it open?.....
Is its use limited to "free" patients?.....
If the hospital publishes an annual report, please mail copy under the enclosed frank.

CHARGES FOR CARE OF INJURED GOVERNMENT EMPLOYEES

Hospital service in general ward, including (1) subsistence, nursing, necessary medicines, dressings, laboratory examinations, (2) when necessary x-ray examinations, ambulance service and the use of the operating room, and (3) the furnishing of copies or abstracts of case records when desired by the commission, at \$..... per day.

Hospital service in the general ward to include.....
.....at \$..... per day.

Medical and surgical treatment for hospital patients, at \$..... per day.

This treatment will be furnished by.....per visit.
Out-patient or dispensary treatment, including all necessary medicines and dressings, at \$.....per visit.

Medical and surgical treatment for dispensary or out-patients, at \$..... per visit.

This treatment will be furnished by.....
Signature.....

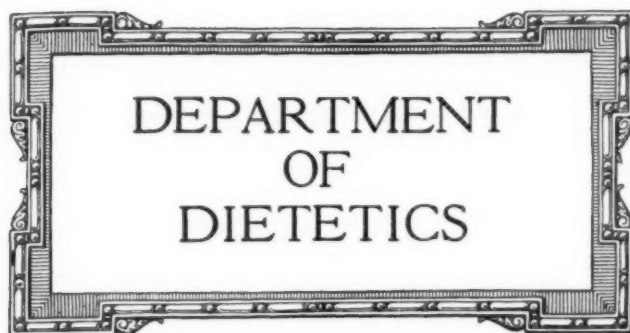
Title of person signing.

Date.....

Hooveritis

Each paper, book and magazine
Sprouts upward like a geyser
Recipes for saving things;
We're growing thin and wiser!
We salt down beans, dehydrate greens,
Store up foods like a miser;
We're going to preserve the world,
And also can the Kaiser.

—Edith Gooding, in B. R. & P. Railway Employees Magazine.



Conducted by MISS LULU GRAVES.

Please address items of news and inquiries regarding Department of Dietetics to the editor of this department, in care of THE MODERN HOSPITAL, Conway Building, Chicago.

Oleomargarines and Other Fats

The present necessity for conserving animal fats may prove to be a blessing in disguise to the culinary departments of hospitals and other public institutions, as well as to the households of our country. For a number of years we have had on the market substitutes for butter which were wholesome and nutritious products, but the deep-rooted and emphatically expressed prejudice of those who make up our hospital menus against anything that savors of substitutes has made it impossible for us to make a very general use of oleomargarine which was made of animal fats. One reason for this prejudice was the lack of color in the original product; the same feeling is shown toward butter which has no color. In some way the belief has prevailed that there is a definite relation between the color of the butter and its quality. This belief has prevailed to such an extent that it has been necessary to add coloring matter to butter during a greater part of the year in order to make it acceptable to the general public.

In the spring of the year, when the dairy cow is fed upon fresh green feed, the cream and butter are yellow. L. S. Palmer of the Missouri Agricultural Experiment Station has given as much enlightenment on this subject. He tells us there are two classes of yellow pigment found beneath the chlorophyll of green plants, or at least hidden from the eye by the green color of the plants (chlorophyll). One of these classes is called carotin, from the pigment of carrots, the other is xanthophyll; there are relatively few feeds that furnish an abundance of these pigments and one of them is grass. As this is a summer feed, "it is impossible for the dairy farmer to help the usual condition of his cream and butter during the winter months by feeding his cow any special feed." Even though it is possible to help it to some extent, it is not economical to do so. The fat in the milk carries the yellow pigment, but there is no direct relation between the color of the cream and the amount of fat. He makes the statement that "as a matter of fact, instead of cows giving a low per cent of fat in the winter when the fat is usually naturally colorless, it has been definitely demonstrated that cows on the average give a higher percent of fat during the winter months than they do in the spring and summer." As long as the other qualities are what they should be, there is no reason for the demand that butter or cream be yellow, neither is there any relation between the color and the taste or the nutritive value of the butter.

These latter statements apply equally well to oleomargarine. The recent high price of butter has increased the consumption of oleomargarine to a very great extent for

cooking purposes, but there is still much senseless objection to using it on the table. Fat is necessary in the diet; butter and cream furnish this fat in a form most acceptable to many people and none of us will dispute its excellence. With the ever-growing scarcity of milk, it is no longer a question of what we like or dislike. In view of the fact that it requires several quarts of milk to furnish cream enough for a pound of butter, it behooves us to substitute other fats for butter to considerable extent. It is not to be expected that we forego the use of cream and butter entirely.

Some objection has been made to oleomargarine because of lack of vitamins, or food hormones. This is not serious, however, as a diet with the variety found in the average home will supply the necessary food accessories which are present in beef fat, oils, green vegetables and some fruits. Only in the homes of extremely limited means would this danger occur, and it is doubtful if butter is used in these homes, anyway, now that prices are so high. A circumstance in connection with the use of these products which is much to be deplored is that a tax is imposed upon them which makes it difficult for their manufacturers to compete with butter in the market. There seems to be no legitimate reason for this tax, and it is to be hoped that the present war conditions may bring about the removal of this assessment.

The nut margarines which are being put upon the market in such enormous quantities are receiving more favor than have the margarines made from animal fats. The nut margarines are made from peanut oil, coconut oil, corn oil, cottonseed oil, and some other vegetable oils, but in this country the chief sources are those above named. These oils are carefully refined and deodorized to remove their characteristic flavor. Milk, in which are cultures of bacteria that will give the flavoring of butter, and salt are added. They contain no animal fat; the ingredients and process of manufacture are such that the nut margarines are a delicate product and require care in handling. They are not stored as animal margarines may be, but are fresh when shipped from the factory. They have practically the same nutritive value as butter, with the exception of the food hormones before mentioned.

Their flavor seems to meet with more popularity than did that of animal margarines, and no doubt their advent on the market will help materially in the conservation of butter.

The Cafeteria in the Nurses' Dining Room at Lakeside Hospital, Cleveland.

The problem of securing competent employees in the kitchens of our hospitals has become a serious one, especially in cities or towns where there are factories or other large industries employing large numbers of people to whom they offer very high wages. Now as never before is it necessary that food materials be utilized to the last particle, yet it is practically impossible to get employees who can be given any responsibility in the care or handling of food. The waste and breakage is appalling to those of us who have previously been able to keep these items down to a minimum.

At Lakeside Hospital the situation has been much relieved by installing cafeteria service in the dining room of the nurses' home. The primary object in establishing this system was to relieve, if possible, the situation which had been brought about by unreliable people, namely, poor service, food served in an unattractive form and with no regard for keeping "hots" hot and "colds" cold, milk and cream invariably being mixed or interchanged,

and an unreasonable amount of waste. This situation no longer exists and the nurses are well pleased with the change.

Previously the service in the dining room was under the jurisdiction of the training school and the same maids did the work there who did the dormitory work in the nurses' home. Under the new arrangement the cafeteria and dining room service have been transferred to the department of the dietitian, with the dormitory work in the home distinctly separate. Under the old system twenty-two maids were required to do the work in the nurses' home. Under the present system four women and four men take care of the entire dining room service, while eight maids do the dormitory work.

We have much more satisfactory conditions and much less waste with a fewer employees. The saving of wages and board of these six employees is another item of economy, but a far greater item is the saving of wear on equipment, breakage, and the waste, which is increased with every person added to our payroll.

Numerous manufacturing plants and other large corporations have published statistics regarding the expense incident to change of employees and training new people, so we will not take space here for our figures; suffice it to say that they are on a par with those published—almost equal to those of the Pennsylvania Railroad.

Our equipment consists of a steam table, salad table with ice-pan compartment and counters of white (carrara) glass, all of these having mountings of German silver; a dishwashing machine, coffee urns and cream dispenser. Our trays are aluminum, and we have three dish carts for gathering up the dishes from the dining rooms. The equipment is very good in every respect, our service room conveniently arranged and attractive in appearance. We serve 200 to 225 people three times daily with no delay whatever. A nurse enters the cafeteria, makes the entire circuit, and leaves with the entire meal on her tray in considerably less than one minute for breakfast and luncheon and no more than a minute at dinner time. Nurses are privileged to return for second servings if they wish.

New York Dietitians Give Conservation Dinner

The New York Association of Dietitians met at the Central Branch of the Y. W. C. A. on April 17. The meeting was in the form of a conservation dinner, and showed how palatable a meal can be served in using the foods which our allies do not need. The meal and recipes were prepared by the class in cooking of the Y. W. C. A., directed by Miss Penrose. The menu was as follows:

FIRST COURSE
Vegetable soup
Wheatless wafers
Celery

SECOND COURSE
Meatless loaf
Spinach
Hot war biscuits—nut butter

THIRD COURSE
Pineapple and cream cheese salad

FOURTH COURSE
Maple ice cream
Oaten knickerbockers
Coffee

After the dinner, Mrs. Mary S. Rose, deputy food commissioner of New York state, spoke of the work the state, and New York City especially, were doing for food conservation. She spoke of the continual readjustment of the food situation and the important foods to be saved and those for which we should create a market right now.

Miss Lord of the Pratt Institute spoke of the wonderful work of the national Food Administration—of its gi-

gantic proportions, and of our great duty of cooperation. Miss Lord told very vividly how food would have to win the war and of the necessity of educating the people in the principles of conservation. Miss Lord said it was our personal responsibility to secure loyal followers of the government Food Administration.

Miss George, head of the dietitian division of the nursing service, spoke of the need of dietitians in the service. There are 1180 members of the Red Cross now either teaching or in active service; 42 are in foreign service, 65 in cantonments, and 12 in naval stations.

Miss George read letters from dietitians in France, showing the lack of standardization of the work of the dietitian. She said that we surely would accomplish standardization soon, though. A round table was held after the talks.

The May meeting of the New York Association of Dietitians was held in the nurses' home of the Post-Graduate Hospital. Mr. Panchard, comptroller of the Hotel McAlpin, Hotel Claridge, Cafe Savaran, and the Fifth Avenue Restaurant, spoke on "Waste of Food and Conservation." Mr. Panchard spoke of the necessity of preparing "left-overs" in an attractive way if we are to eliminate all waste from our kitchens. He claimed that Americans did not know the art of preparing cold cuts of meat and vegetables. Mr. Panchard has recommended to the Food Administration the adulteration of wheat flour in the mills beginning with the new harvest.

The Owl That Never Spoke

A popular jingle has been revamped to express the military man's idea of the perfect soldier. The new version runs:

"A wise old owl lived in an oak—
The more he saw, the less he spoke;
The less he spoke, the more he heard—
The soldier wise will heed that bird."

A certain member of the Medical Reserve Corps who is said not to be an apostle of the philosophy of silence found the foregoing too much for his feelings, and accordingly burst forth with the following *jeu d'esprit* on the subject:

"Your wise old owl who lived in an oak,
Who saw and heard, but never spoke,
Who'd sit on a limb and blink and blink
To make his friends think he could think,
One day opened his mouth to talk,
When out came—not wisdom's words, but chalk."

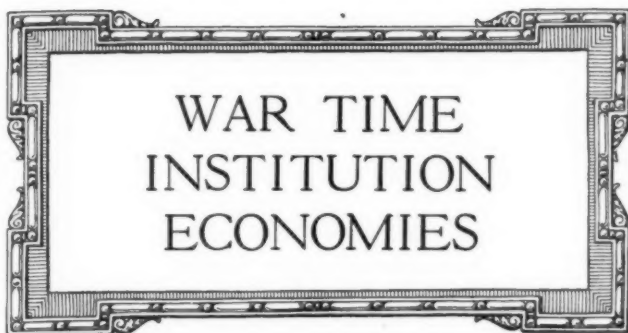
"In other words, that wise old bird
Had never seen, nor had he heard.
You may take the taxidermist's word—
He was only a 'make-believe' wise bird."

MORAL

"The tale of the owl who lived in an oak,
Who saw and heard, but never spoke,
Has this moral: Heads that are stuffed with chalk
Had certainly better not try to talk."

I find the great thing in this world is not so much where we stand as in what direction we are moving. To reach the port of Heaven we must sail sometimes with the wind and sometimes against it; but we must sail and not drift nor lie at anchor."—O. W. Holmes.

The Chamber of Commerce of Junction City, Kas., is preparing a petition for a special election of Geary County, to vote on bonds for the establishment of a county hospital.



Economy in the Engineering and Mechanical Departments*

By FRANK E. CHAPMAN, Superintendent Mount Sinai Hospital, Cleveland, O.

In these times of war, the task of the hospital administrator in effecting all possible economies devolves itself into a twofold obligation. With the increased cost of all commodities, and, in most instances, the disproportionate increase in income, it is compulsory that all expenses be kept at the lowest possible point. In addition to this, and equally important, each one of us owes a very definite patriotic duty to hold to a minimum all expenditures of material and labor in order that these commodities may be turned to war production.

To me has been assigned the subject of placing before you suggestions looking toward a more economical operation in the mechanical department of the hospital. It is suggested that, as a beginning, you go to the personnel of your engine room and put up to them their duty to the institution and their duty to the country at large in this respect. It is further suggested that, instead of taking your engine room performance as a matter of course, each one become better acquainted with conditions as they actually exist and use the information that we thus gain to effect improvements. Most of us think our power plants are fairly efficient, but it really is surprising what we can discover if we will go into the matter.

Boilers.—The boilers being the origin of our power, let us first take them into consideration. Too much emphasis cannot be placed upon a very frequent and thorough inspection. One very common defect in boilers is that the brick wall around the clean-out doors, stoking doors, and even side walls of boilers, is permitted to open up, and, as a consequence, the temperature is reduced in the combustion chamber. Apertures of this kind can be found by inspecting boilers by candle flame and can be stopped by pointing with a stiff mortar of plaster asbestos. It is even suggested that it might be advisable to give all exterior brick walls of the boiler a thin coat of plaster filler troweled on about one-sixteenth of an inch thick. This material can be obtained from any power plant supply company, in barrel or half-barrel lots. In a great many instances, these cracks are not considered of very much importance, and air leaks are overlooked because they cannot be seen.

Another suggestion is that you look after your baffle walls. These walls are rather inaccessible, hard to inspect, hard to repair, and very often are allowed to deteriorate by reason of lack of knowledge as to their condition. It is very important that they be kept as near intact as possible in order to cause a proper passage of gases over the heating surface of the boiler.

Keep your boilers clean at all times. An accumulation of pockets of soot on the heating surface, in flues, and around tubes bespeaks inefficient operation. Soot blowers

should be used regularly, but they are not always efficient. Every opportunity should be taken to inspect the boilers, clean out places not touched by soot blowers, and at the same time make an internal inspection of the boilers to see that everything is in good condition, the tubes free from mud and scale, etc. The formation of scale is another thing that must be avoided if you would have an efficient operation. If you find that there is a large amount of deposit, it would be well to have the water analyzed and determine upon the compound to use that will reduce the scale. This analysis is not necessary often, but it will give you the character of the water and permit you to decide what method to use in treating it if necessary.

Watch your coal pile and also your ash pile. If at all possible, it is extremely desirable that both coal and ash be weighed and check kept of the proportionate amount of ash produced each month.

Keep your recording gauges in good condition and insist on reading these records yourself. Let your engine room force know that you are watching their performance. If they do realize this, they will probably be a little more careful of that performance.

Set up a very definite schedule of work for your boiler room help. Make the fireman's performance as convenient as you can, but have a definite time for each of his several duties and see that the work is done.

Steam Lines.—First of all, the importance of having all of your steam lines covered cannot be emphasized too strongly. I have not before me definite authoritative reference as to the percentage of loss in uncovered lines, but I have read these figures and they are indeed startling.

Watch your traps. Steam traps at the best are rather wasteful and, if they are not kept in good condition, will waste an inconceivable amount of steam.

Make use of all the exhaust steam possible. Return water to the boiler as near 212 degrees as is possible, using exhaust steam to reheat the water. Do not permit the hot water from condensation originating at the heating system, the hot-water heater, and cooking and sterilizing apparatus to be wasted. All of these should be returned to the boiler, using as small an amount of raw water as is possible. Watch your leads for leaks. No matter how small they may be, a steam leak costs money.

Engines.—Watch your valve packing and keep it soft and tight. Keep your engine well lubricated. Pick up knocks quickly. Keep everything tight so that there will be a minimum of wear. Watch for steam leaks in your engine.

Repairs.—By keeping all apparatus such as ward sterilizers, operating-room sterilizers, cooking apparatus, etc., in first-class condition you save not only consumption of coal, but also much time and labor in repairs. The adage, "A stitch in time saves nine," certainly is applicable in institutional repairs. A minor repair if taken in the beginning will save a major repair later on.

Ice Plant.—Most of us have undoubtedly received a questionnaire from the government in regard to the consumption of aqua ammoniac and anhydrous ammonia. With the demand for these commodities for war purposes, we are all assured of a very definite shortage, making it absolutely essential that the utmost care be used in consumption. Make careful and numerous inspections of your valves, of the pump, and watch for ammonia leaks on your line. All valve stems should be kept free from rust. Keep the condenser of the machine free from scale and mud by reversing the flow of water often and removing scale when necessary. All refrigeration coils should

*Read before the Ohio Hospital Association at its fourth annual session, Columbus, Ohio, May 29, 1918.

be kept free from a heavy coating of frost. This coating retards refrigeration. This can be accomplished by stopping the flow of brine for a short period each twenty-four hours, preferably at night.

It is suggested that comparative tables of performance be kept. The government will be very glad to furnish statistics for your district showing the mean average temperature, and it is, to say the least, interesting to make comparison of the amount of coal used as compared with the temperature for a given period. Institute a campaign of good power-house house cleaning. If you will pardon slang, keep your personnel "on its toes," and you will unquestionably get results.

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FOOD CONSERVATION AT UNIVERSITY HOSPITAL, PHILADELPHIA

How One Hospital Is Doing Its Bit to Win the War in the Kitchen and Dining Room

By MARION E. SMITH, Superintendent, University Hospital, Philadelphia.

It is difficult to write a paper on food conservation, as the needs change almost every week, and as the weekly or daily requests come out in the papers we conform to them at once, but I will give briefly what we have attempted to do here.

We feed about seven hundred people daily. In April, 1917, we started a meatless day, choosing Friday, as so many Catholics are employed in large institutions. We saved \$38.42 on our first meatless Friday, which was on April 26, 1917.

The Food Administration then asked everyone to save fats and we at once cut out all butter from cooking, and used lard until we were requested to save pork, since which time we have used and are continuing the use of the nut butters and drippings. We saved \$41.32 in butter the first week. We use cream for breakfast only, except on the private floor, and we have recently made a boiled dressing for salads to save olive oil.

The quantity of eggs used in the making of cakes and puddings was cut to half and we saved \$22.20 the first week. Although the saving of food is more important now than the saving of money, these items may be interesting from both standpoints.

We have served no lamb or veal since the Food Administration asked us to save the meat of young animals. We have cut bacon entirely, except for the private patients, to whom we give it every day with the exception of Tuesdays and Saturdays, the Food Administration's porkless days.

The private patients get no wheat cereals or wheat flour for cooking, but we buy for them the "Victory bread" from a baker. Of course, all special patients, i. e., metabolic, diabetic, etc., have anything that is necessary when ordered by a physician.

We have used no canned goods of any kind since last spring, but have confined ourselves strictly to the use of the fresh vegetables that could be bought in the market. We planted a war garden in the grounds with the following results:

The amount of vegetables grown in the garden, commencing on May 30, 1917: 125 bunches of parsley, 50 dozen bunches of celery, 7½ baskets of beans, 6 baskets of spinach, 6 hampers of white turnips, 6½ baskets of carrots, 4½ hampers of parsnips, 5 barrels of cabbage, 4½ barrels of beets, 10 baskets of dandelion, 21 bunches of radishes (50 radishes in bunch), 3 baskets of lettuce, ½ basket of onions.

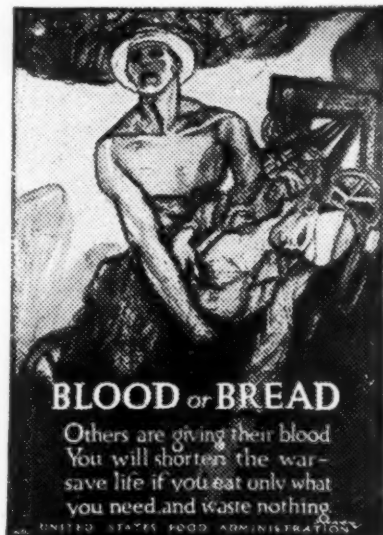
Then came the request to save sugar. This we at once

cut in half, and at present are serving only three-quarters of a pound of sugar a week a person.

When the request came to conserve meat further we instituted meatless lunches, having two fish lunches besides the meatless day; and, as we have for several years served no meat for breakfast, except to the help, we always have had one meatless meal a day.

On meatless days we serve for lunch a cream soup; either rice waffles, baked beans, or buckwheat cakes; salad, cheese, and stewed fruit. For dinner we have fish with two vegetables, besides potatoes, and dessert. Hashed brown, lyonnaise, stuffed, or scalloped potatoes make the dinner more acceptable.

Since the urgent need for conserving wheat has arisen, we have gone through various stages of conserving it. We bake our own bread, and at first we used 70 percent wheat in the bread six days a week and served white bread one day made of half wheat flour and half white cornmeal. By gradual stages we have used less and less, until for the last ten days we have used none. In the beginning of the wheat conservation one loaf was put on each table, slices



being cut off as needed, and in a very short time we were saving three hundred and fifty loaves a week. In the wards bread is taken around on a plate and each patient is given one slice, and more if requested. In January, 1917, we used forty-eight barrels of wheat flour; in January, 1918, we used eighteen barrels of wheat flour and thirty barrels of substitutes; in February, 1918, we used seven barrels of wheat flour and the rest substitutes; in March three barrels and in April none.

The most difficult question has been and is to make good bread without wheat flour. If any of the readers of THE MODERN HOSPITAL can solve this question by giving a satisfactory recipe, it will be most gratefully received.

We are now serving potatoes three times a day and this has saved about one hundred and ninety loaves of bread daily.

We have given up all cereals containing wheat and all crackers containing wheat, and in place of them use hominy, cream of barley, cornmeal, rice, oatmeal, and rolled oats, and use rye crackers entirely.

The bread which we now make from rye flour and rice flour is not light, but to the majority of people it is palatable and wholesome. No other bread is served at the

meals at which cornmeal bread, cornmeal muffins, or oatmeal muffins are served.

Corn starch, corn flour, barley flour, and rice flour are used for the thickening of soups and gravies, and the cakes are made from cornmeal and rice flour. We have recently stopped making pastry of any kind.

The argument may be used that war bread and war cake are not so appetizing as wheat bread, and cakes made with butter, wheat flour, and plenty of eggs; but the conservation of food, in so far as it is consistent with health, comes first, and we have had no complaint from any department of the house that anyone's health has suffered from the change. There is always more or less dissatisfaction among domestics employed in institutions. The other employees have on the whole accepted it gracefully.

No especial credit is due. It is a serious and earnest duty, for nothing in the world matters so much as to win the war, and nothing that has been done here can be considered privation, much less sacrifice. It is all many of us can do, and to fail in this would be selfish, unpatriotic, and culpable.

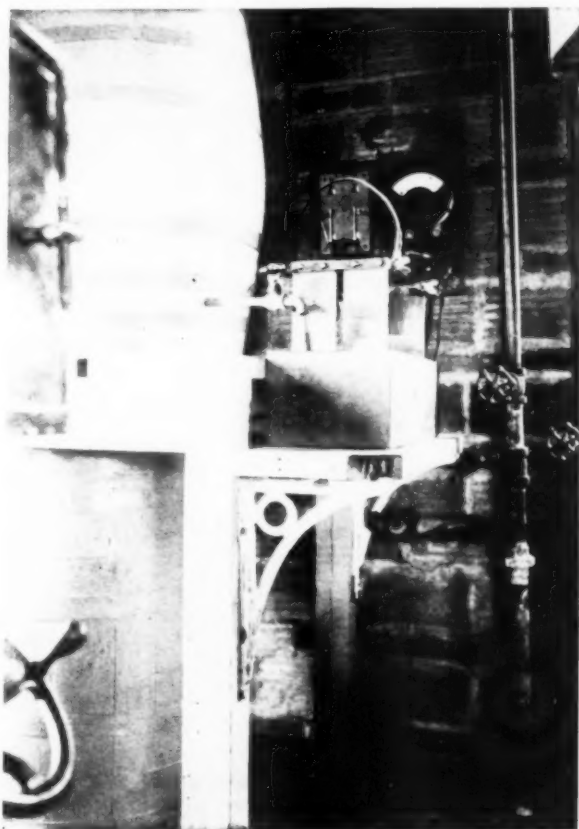
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A SIMPLE CHLORINE DISINFECTANT APPARATUS

Economical Home-Made Device for Producing Chlorine Bleach for the Laundry and as a Disinfectant

By PLINY O. CLARK, Superintendent, Ohio Valley General Hospital, Wheeling, W. Va.

We are washing from 17,000 to 25,000 pieces of linen each week and have felt the need of a cheap bleach, one which would not harm the clothes and yet would actually



Home-made apparatus for producing chlorine bleach.

accomplish results, so after observing the way in which the commercial laundries make chlorine, our chief engineer decided he could make for our use an apparatus which

would serve all purposes and which could be installed at about one-third the cost of the machines for sale.

Two old alcohol barrels, a plank, four short pieces of 4 by 4's, two brass $\frac{3}{8}$ -inch valves, about 18 inches of brass pipe, one brass ell, 2 feet of $\frac{1}{2}$ -inch rubber tubing, two brackets, some nails, and the battery equipment were all we needed. As will be seen from the illustration, one barrel was mounted on top of a trestle and the other one is also upon a trestle, being raised off the floor at least 12 inches, so a pail can be set underneath the faucet.

It is not necessary to remove the head from the lower barrel; an opening through which the rubber or brass tubing can be led from the battery is sufficient. All connections coming in contact with the saline solution must be brass or rubber. It is not at all necessary to have a slate tank for storage, for as soon as the wood deteriorates, in the course of a year or two, the barrel may be replaced.

The battery will cost, depending upon its size, from \$80 to \$100 including switch and armature.

To make a barrel full of saline solution 8 pounds of ordinary cattle salt is required. This should be stirred with a wooden paddle until thoroughly dissolved. By passing this solution slowly through the battery with 110 volt D. C. current (A. C. current may be used just as well) requiring from 10 to 20 amperes, the solution is converted into chlorine. This should be kept made up fresh every day or two, but will not deteriorate materially in forty-eight hours.

For a 36 by 54 washer loaded heavily, about 8 quarts of the chlorine is used for water as hard as that found in the Ohio River.

We find that the chlorine not only keeps the clothes soft and white, but it saves 50 percent of the soap. We also use this chlorine freely as a disinfectant about hoppers, slop sinks, kitchen sinks, etc.

This bleach will cost less than 1 cent per gallon.

British Nurses Take Up Gardening

In many British hospitals and infirmaries nurses surrender three or four hours a week to the business of food production, and may be seen hard at work trenching, breaking clods, and preparing the ground for planting, says *The Hospital*, London. In places where allotments are to be had in convenient proximity to the institution, the nurses combine to take up plots, with the added interest of growing what they please and presenting their produce to the charity. The nurses at the Prince of Wales' Hospital, Tottenham, presented two and a quarter tons of potatoes to the institution through their labors last year. Probably, continues *The Hospital*, the idea is capable of much wider extension. After the first shock to the muscles of tackling a hard piece of ground, the labor has a wonderfully invigorating effect, especially upon people whose lives are led indoors. Allotment work is well adapted to the large class who want to help in food production but can only give a fragment of their time. A hundred nurses, giving up an hour every other day to field labor, are equal to thirty full-time laborers, and if every institution helped, according to its situation and capacity, hundreds of fresh acres could be got under cultivation.

British nurses are to be congratulated on their pluck and devotion, and also on the fact that their muscles can derive benefit from "trenching, breaking clods, and preparing ground for planting," in addition to their ordinary hospital duties.

THE WAR: ITS HOSPITAL, MEDICAL AND NURSING ASPECTS

AMERICAN MEDICAL AID TO PARIS CHILDREN

Health Centers Established by the American Red Cross Over Large Areas of Paris—Problem of Rebuilding the Health of French Children

By BERTRAM KELLY, Paris.

France is fighting today not in the trenches only. Behind the lines, in every city and town in France, another battle is being waged, the battle for the health of France's children, for on the children of today depends the France of tomorrow.

That is why the American Red Cross has established, in the poor and residential districts of Paris, health centers combining both medical and social work, for the care of the babies and women of the neighborhoods. Since No-



Fig. 1. Dr. Parker, of the Red Cross Children's Bureau, examining a refugee child in the dispensary at rue Boissy d'Anglas.

vember 1, nine such centers have been put in operation, all of them in connection with existing French organizations. That was the only way to give immediate and intelligent aid to the French. French organizations for the care of the civilian population are not lacking, but for three years military charities have claimed first attention, and civilian charities have suffered. It has been the task of the Americans to help revive and strengthen these struggling French organizations.

The plan, as first conceived, was that the Children's Bureau would conduct children's clinics in dispensaries to be opened by the Rockefeller Foundation for the Prevention of Tuberculosis in France. An experimental start was made in the nineteenth arrondissement, one of the most congested districts of slums and factories in Paris, made more crowded still by the addition since the war of six thousand refugees. Here a thorough study of health conditions has been made. It was soon found that one dispensary would be inadequate for the work of even this one arrondissement and early in February another health

center was opened in the Rue St. Mingott. Two more are in process of establishment in the district.

Just around the corner from the Place de la Concorde, the most beautiful square in Paris, is one of the largest and most important of these health centers, centering about the refugee dispensary taken over by the Children's Bureau and the Rockefeller Foundation from the "Tuberculeux de la Guerre," of which Mrs. Edith Wharton was the director. Its waiting rooms are full of interest; two days a week they are filled with swarthy-skinned refugees from Serbia, two other days with the forlorn, peaked children from Alsace and the north of France. Three hundred pa-



Fig. 2. A Red Cross doctor ministering to a future citizen of France.

tients are taken care of weekly, including the medical work of the Society of Friends. Dr. Richard C. Cabot of Boston gives this dispensary his personal care.

A health center in still another type of community is that in the fifth arrondissement, one of the "tough" districts of Paris (the Rue Mouffetard, said to be the toughest street in Paris, is the social meeting place of the quarter). This center has been opened in connection with the Oeuvre de Mlle. de Rose, a charity founded by Mlle. de Perignan, a granddaughter of Lafayette. Mlle. de Rose has carried on the activities of Mlle. de Perignan since her death in 1906, and from one *patronage* (similar to an American social center) for children and young girls she has developed the work until it now includes a home for working girls, a model tenement house, a vacation home for working girls in the environs of Paris, and several agricultural schools for children in the country.

For all these activities she lacked a health center. The Children's Bureau has supplied it. A dispensary has been opened in charge of Dr. Blair, with clinics for children twice a week, and twice a week for mothers. On the fourth clinic day, when the work was but barely started, twenty-six children were treated.

In two munitions districts just outside Paris health centers have also been opened. Welfare work is already in operation at the factories in one of these districts, and here the Red Cross supplies a doctor for children's and women's clinics, and a nurse for home visiting. It is estimated that three hundred families are thus reached. In the other and much larger district the problem is more acute and less efficiently covered. Mlle. Bassot had conducted a settlement house for ten years and had worked on in her individualistic French way for the good of the neighborhood, but when war came the need was almost too great for her. The district population increased from

seventy thousand to one hundred thousand; two hundred munition factories sprouted like mushrooms over night, but no new buildings to house factory workers were erected. The congestion was bad and spread of disease threatening. Mlle. Bassot appealed to the Red Cross for aid, especially in caring for the women and children. A health center was started under the direction of Dr. Bancroft early in December; the number of weekly clinics soon doubled, and the work is rapidly outgrowing its present small quarters.

Thus a very large area of Paris is covered, and the work has really only just begun. A doctor and nurses have been sent to another social settlement, the Grenelle Mission, in the rue de l'Avre, and a nurse has gone to another, Kremlin-Bicetre. Thanks to American Red Cross aid, a small general hospital has been reopened at Puteaux, a suburb of the capital, to which will be sent nose and throat cases from all the dispensaries of the Children's Bureau in and about Paris.

The scope of the health center enlarges constantly. The health of children depends largely on their nourishment, and one of the first things discovered by the American

in France, and a group of other American doctors, in consultation with prominent Paris physicians, have worked out a plan whereby French nurses will be trained to continue the work, both medical and social. The training period will cover ten months—five in institutional training and five in field work.

It is constructive work, building to bring back to the France of tomorrow the sturdiness and vigor of the France of yesterday.

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REBUILDING FRANCE THROUGH THE CHILDREN

More About the American Red Cross Children's Bureau and the Oeuvre de Mlle. de Rose

Those who have read Mr. Kelly's article just preceding will be interested in the following, clipped from the *British Journal of Nursing*:

"The American Red Cross Children's Bureau in Paris, of which Miss Leete is the wonderful chief nurse, is organizing a campaign for children's welfare in France, and is inviting reports from all those engaged in this interesting phase of national work. It is proposed to begin before the birth of the child, and to appoint district nurses—thoroughly trained, if possible—and these nurses are to be helped by a few ladies, to be called 'visiteuse d'hygiene,' instead of, as at present, 'garde malade visiteuse,' which they are not. These workers will be chosen from the school of 'puericulture,' and are to be paid, so as to do away with amateur pretensions.

"Dr. Anna Hamilton has been consulted about the work in Bordeaux, as her fame is far-reaching in the states, and she has, of course, given sound advice and practical help in the organization of the work in Bordeaux. Already at the Maison de Sante Protestante there are consultations for expectant mothers, infant consultations and creches, and there will be collaboration with the Children's Hospital and other departments. The committee have granted four wards for the work of the Red Cross Children's Bureau, which will cover the expense, and the nurses trained in the school will be engaged on the recommendation of Dr. Anna Hamilton.

"As about one hundred and forty thousand young children die yearly in France, and now there are many mothers doing men's work and making munitions, the health of the babies suffers in consequence to a terrible degree. In Bordeaux it is sad to see the number of tiny tombs in the cemetery."

The Oeuvre de Mlle. de Rose, mentioned by Mr. Kelly, is interestingly explained in a letter by Miss Ashe, published in the *Pacific Coast Journal of Nursing*:

"I stumbled across another settlement in Paris just by chance. The moving spirit is Mlle. de Rose, a descendant of an uncle of Jeanne d'Arc. Her mother is a duchess—very wealthy, influential people. Mlle. de Rose conceived the idea twelve years ago of going into a poorer quarter of Paris to live. She has been teaching every week in a sewing school in this quarter—the fifth arrondissement, near the Latin quarter. The friend under whom she was working died, leaving her work to her as a legacy. She left home (an unheard-of thing in France) and there she has lived ever since, contributing every penny of her income to her work. She has built quite a wonderfully planned tenement (she does not know it is a 'model tenement'); a home for working girls, also wonderfully planned; conducts all kinds of recreational work; has a chorus of three hundred voices, and since the



Fig. 3. Taking histories in the waiting room of a Paris dispensary.

doctors was that the children who came to the dispensaries were not receiving the proper kind of food. This led to investigation and study. Most mothers had been forced into war work outside their homes and the children had to take their midday meal—the most important meal in the French household—in school canteens. So it came about that late in January the Children's Bureau began providing supplementary food—flour, beans, condensed milk, ham, sugar, tinned beef, cheese bought in America—to the school canteens of the nineteenth arrondissement. This service will be extended to other poor districts of the city.

Another important phase of the work is the preparation for its continuance when peace comes and the army of Americans leaves France. Dr. William Palmer Lucas, professor of pediatrics in the University of California, and chief of the Children's Bureau; Dr. William Charles White, of Pittsburgh, chief of the Bureau of Tuberculosis of the American Red Cross; Dr. Livingston Farrand, president of the University of Colorado and chief of the Rockefeller Commission for the Prevention of Tuberculosis

war has branched out into an agricultural home for orphans. But before I get on to that subject, I must tell you of her trousseaux. When the girls go to work and leave her younger sewing classes, a trousseau is started for them. All of the materials are provided for all kinds of undergarments, bed linen, etc., which is left in a locker at the settlement. They have no name for their work, and have never published a report, although large sums of money have been given them to spend. Mlle. de Rose has evolved, from her own brain, common sense, experience, and ingenuity, a wonderful placing-out system for children. She forms families of not more than twelve, all ages, places them on a farm in charge of a motherly woman and there brings them up normally. These farms are self-supporting, all being under one direct, scientific management of a practical farmer. They bought the land and are rapidly paying off the mortgages on it. She has at present about twelve of these farm colonies under her supervision and is increasing them rapidly. Her right hand is a Miss Hopkins, an American woman who turns over her entire income to the place, and the day I saw her was wearing rubber overshoes because she had no shoes. Their rule is never to ask others for money while they have a cent left of their own. As far as I could discover, it is the only rule they have. I have no doubt that I shall find many more French women of this same stamp, but they are so modest about what they do that it is difficult to unearth them."

Of the Society of Friends, whose work also is mentioned by Mr. Kelly, Miss Ashe writes:

"I hope to visit the 'Friends' place at Chalons before my return. I am more impressed with them than with any people over here. As men and women they are a devoted band. The women make this club their Paris headquarters, so I see quite a little of them. They all show a spiritual quality which I see in no other English or Americans. These people have certainly suffered for their faith, for I think they had a hard time in England at first; now everyone respects their splendid work. Dr. Lucas has backed them up in every way; he is sending doctors to them now, and I hope later on I can get them nurses as well."

* * * *

AMERICAN RELIEF WORK IN LOMBARDY

In Milan One Can See More of War Life Than in Any Other City in Italy

The following interesting description of the city of Milan was contained in a communication forwarded from that city to the *Red Cross Bulletin*:

"Milan, the capital of Lombardy, . . . is the great military center for the armies of the three nations now opposing a united front to the foe across the Piave. . . . Nearly every phase of the work of humanity done under the Geneva flag finds example or reflection here, even to the ambulance work at the front.

"Milan is the base and headquarters for the three American Red Cross ambulance sections now operating along the Piave and in the mountains, driven by one hundred American volunteers who have already endeared themselves to the Italian soldiers. Soon, it is planned, more A. R. C. ambulances will be added to the sixty now at work, and more Americans in khaki will join the one hundred who came first. To Milan come the cars for repair, and the drivers on infrequent leave. It is like coming home, for it was from here that the cars and men started on the trip to the army after presentation ceremonies still remembered in Milan. The picture of the little American ambulance circling before the famous cathedral will not soon be forgotten. . . .

"Milan's importance as a relief center and some insight into present conditions may be gained from a few figures. Lombardy has a population of 5,000,000. From this city 62,000 refugees were distributed to other points: 26,000 remain. . . .

"The American Red Cross has a refugee's home, . . .

complete with kitchen, dining-room, two large bed wards, and a sewing room. Another activity of the A. R. C. is the soup kitchen where 250 refugees receive meals daily. . . . In a few days a rest house for soldiers passing through Milan will be opened at the Central Railway station. . . .

"Milan is the largest military hospital section of Italy and the work done by the A. R. C. in this connection is correspondingly great. It is under the direction of Miss Sara Shaw, so long associated with the Bellevue Hospital in New York.

"The problem of the Red Cross in Milan is manifold. Immediately the hungry must be fed; the homeless cared for. This is the phase most intimately connected with the refugees. Milk must be procured for children. Infant mortality in Milan is 160 in 1000 for children under one year of age. It should not be more than 50 in 1,000 say the experts. Soldiers' families who are in want must receive aid and quickly. Nothing so increases the moral stamina of the soldier as to know that his family does not suffer while he is fighting.

"Hospital supplies are always in demand. When they are needed the need is immediate. The soldiers themselves must be well looked after, the wounded and the sick. All of this comes under the mission of the Red Cross and then, most terrible of all the problems, perhaps, is the scourge of tuberculosis which has been so greatly increased by the war."

* * * *

American Red Cross Shelter Canteens in Milan

A number of tents have been set up at the central station, Milan, to serve as shelters for the soldiers passing to and from the battle lines. Three of them are dormitory tents and all the beds are provided with mattresses and warm covers. The other tents are equipped with shower baths, washstands, etc.; one is a sitting room furnished with facilities for writing, books, etc. All are illuminated by electricity. They have been tastefully decorated with flags, pictures, mottoes, etc.

This is the latest work of the American Red Cross which has given so many manifestations of its generous spirit.—Red Cross Bulletin, from *Il Corriere della Sera*, Milan.

Worse Than War

The hospital to which they took him on the north coast of France was in the hands of an Anglo-American unit. And in the particular ward where he was placed reigned a night nurse who understood but a few words of his language.

The poilu was suffering from a badly shattered leg. They had operated in the afternoon. It was night before he awoke from the effects of the drug administered. Immediately he set up a great howl.

Over rushed the nurse to his side, and was met with a torrent of indignant French. She soothed, scolded him, gave him such nourishment as he might have. No use. Then she remembered a nurse who could speak French, and fetched her. There followed a long colloquy which left the poilu somewhat puzzled but more peaceful.

"Well?" asked the new arrival.

"They didn't explain to him about his arm."

To mend his leg, an expert surgeon had taken some bone from his arm to graft in the shattered limb. So the poilu, who had gone to sleep with only one wound, awoke to find himself with two! No wonder he had raved. He had seen nothing but brutality in the ways of expert modern surgery.—Every Week.

INDUSTRIAL REHABILITATION OF DISABLED SOLDIERS AND SAILORS

Conducted by ELIZABETH G. UPHAM,
Director Art Department Milwaukee-Downer College.

AN AMERICAN SCHOOL OF REEDUCATION FOR CRIPPLED MEN

The Work of the Red Cross Institute for Crippled and Disabled Men of New York City—Subjects of Instruction in Training Classes—The Methods of a Special Employment Bureau for the Handicapped

By DOUGLAS C. McMURTRIE, New York, Director of the Red Cross Institute for Crippled and Disabled Men, President of the Federation of Associations for Cripples, Editor of the American Journal of Care for Cripples.

In the past the main dependence in meeting the needs of crippled and disabled men—either soldiers or industrial workers—has been placed in a money allowance or award in the form of pension or compensation. This has served in a certain degree to alleviate misery, but it has failed of attaining any constructive results.

The policy of rehabilitation for self-support and self-respect through a special type of vocational training has been developed to any considerable extent only since the outbreak of the war in 1914. It does not require argument to prove that this is the only logical method, as wise socially as it is sound economically. The only vocational school for cripples as yet in operation in the United States is the Red Cross Institute for Crippled and Disabled Men in New York City. Although this school is still in its infancy, it may be of interest, in view of the necessity for additional work in this field now imposed upon this country, to describe the manner in which the general principles of reeducation, as developed abroad, have been adjusted to American demands and limitations.

The establishment of this reeducational school was proposed to the American Red Cross in May, 1917, by Jeremiah Milbank, who offered, further, the funds requisite to its foundation. The suggestion was considered favorably by the Red Cross and there was organized, under the jurisdiction of its Department of Military Relief, the Red Cross Institute for Crippled and Disabled Men. In addition to the original gift of well over \$50,000, the donor offered the use of the structure at 311 Fourth avenue, New York City, now occupied for the administrative and educational work of the institute. This building will afford instructional accommodation for three hundred men.

While the establishment of the institute was inspired by a desire to build up reeducational facilities which might be of value to the crippled soldiers and sailors of the American forces, it was felt that the problem of the crippled man was a broad one, and in need of attention without discrimination in benefits between civilian and military subjects. It was further felt that the only sound preparation to deal intelligently with the rehabilitation of crippled men at a future date was actual experience in

the rehabilitation of crippled men undertaken at the present moment.

From the economic point of view, the industrial cripple and the disabled soldier have so much in common that the sensible way to develop expert ability in reeducation was to undertake at once the training of the crippled men now at hand. In this effort, the possibilities under conditions of industry and employment in an American community would be critically examined, the mistakes in choice of trades or methods of teaching discovered, the reactions of employers recognized and the consequent requirements in public education indicated, and last—but far from least—a staff of capable workers trained and organized.

These considerations have led to the adoption of the institute's policy as represented in its various departmental



Fig. 1. Red Cross Institute for Crippled and Disabled Men, 311 Fourth Avenue, New York City, the first training school for adult cripples in America.

activities, to be described in the following pages. It is planned that the work of the institute in the vocational rehabilitation of crippled men shall be permanent, for it must be borne in mind that the problem of the industrial cripple is greater, numerically considered, than that of the crippled soldier.

The institute has no official arrangement with the national authorities relative to the utilization of its facilities in the reconstruction of war cripples. Had it waited for such an agreement, its work would not yet have been under way. But the institute is confident that, in working out the national scheme of reeducation, existing facilities of real value cannot fail to be utilized. The present effort is solely to make our facilities worth offering, at a time when other plans may exist on paper alone.

EDUCATIONAL DEPARTMENT

The first consideration in training a cripple who has been a wage-earner is to put him back as soon as possible upon the pay-roll. Thorough trade training is out of the question because of his economic necessity and his adult attitude toward education as such. The range of possible occupations is limited by his physical disabilities. The ideal must be to train him to become an efficient worker in an industrial process in which his particular handicap will count for the least. In doing this, considerable reliance may be placed upon the marvelous process of Nature

whereby remaining powers are sharpened to compensate for the physical loss sustained.

The first step is, necessarily, an individual study of each cripple who is a candidate for training. Rarely are two men crippled alike. Their educational and industrial experiences have been different. Their tastes and aptitudes vary greatly. All these are elements in the problem. As a general rule, a man should be trained for an occupation in which any knowledge or skill he may have already acquired may be turned to his advantage. This does not mean that a man who has been a misfit in the trade he followed before his injury may not be taught a new one, but economy demands that as little as possible be scrapped in making over the man industrially. A mechanic should ordinarily be trained for a mechanical trade, while a man with commercial tastes should be fitted for a different career.

The candidate for training is interviewed by two or more persons, who assess his physical disability, inquire into his educational acquirements and work history, and endeavor to ascertain his tastes and aptitude. It is the policy of the educational department to have the counsel

interest. There is no obligation to repay this loan unless the training improves the man's earning power, in which case he is expected to pay back the loan in installments proportioned to the increase in his wages. It is thought important to make this advance in the form of a loan so as to conserve, to the greatest possible degree, the man's self-respect and to obviate the idea of charity.

It is expected that in some classes work of a productive nature will be done. In such cases, when a man's work proves to be of commercial value, he will receive credit for the work done, either as an offset to his maintenance allowance or in the form of pecuniary profits. When a man completes the course of training, he will either be taken on as a worker and paid wages or sent out to some shop and placed in employment.

Four trades have already been decided upon as subjects of instruction. Equipment has been installed and instruction is under way.

Manufacture of Artificial Limbs.—The manufacture of artificial limbs has seemed an exceptionally suitable trade in which to train crippled men. In point of actual experience, cripples have found it a possible occupation, and in



Fig. 2. A view of the artificial limb department, Red Cross Institute for Crippled and Disabled Men.

and advice of members of the staff and others who have been similarly handicapped and who know from experience the physical limitations of that particular form of disablement.

The occupations to be taught disabled men are being selected on various considerations: (1) The suitability of the given occupation for handicapped persons; (2) the length of time required for training; (3) the standard of wages in the industry; (4) the demand for workers and the prospects of employment; (5) the attitude of the trade toward apprentices.

The length of training required is an important factor inasmuch as during that time the man must be non-supporting. In the case of some industrial cripples, if they undertake training before their compensation is exhausted, they may be supported from this source. In the case of disabled soldiers, their maintenance will be supplied by the government. But in other cases the institute will have to supply a minimum maintenance to the man during his period of training. In necessitous cases, this is supplied from a special fund in the form of a loan without

all limb shops a considerable number of physically handicapped men will be found at work. The cripple has, further, a keen appreciation of the requirements for his product and can, therefore, work with a clearer idea of the object in view. The trade is exceptionally suited to leg cripples, but not to arm cripples, except in occasional instances.

Another factor contributing to the selection of artificial limb-making as an activity of the institute is that, in dealing with crippled men, the institute will need to provide many of them with artificial limbs and appliances. It seems logical that limbs required for necessitous men should be produced in its own shops and that it should employ cripples exclusively in such manufacture.

There is also room in the artificial limb field for scientific research and experimentation looking toward the improvement of the existing types of artificial limbs and the standardization of material and design. There has been great progress in this field since the opening of hostilities in Europe in 1914. The foreign experience will be studied and the endeavor made to adapt to American advantage some of the recent improvements. The institute is in

correspondence with military hospitals and educational centers abroad which manufacture artificial limbs and which give instruction in this work to crippled soldiers. It is securing specimens of the best limbs and prosthetic appliances actually being used in Europe. All of the specimens and data thus accumulated will be utilized in its own work and made available to others interested in the field. In the direction of experimental work, the institute is working in close cooperation with the office of the Surgeon-General of the United States Army, one division of which is giving especial attention to the designing and fitting of artificial limbs.

The trade is considered a good one in which to train cripples for the reason that the demand for artificial limbs at the present time is unprecedented, and the manufacturers are all seeking a wider supply of skilled labor. This insures prompt employment upon graduation for any competent pupils.

The artificial limb shop is located on the second floor of the institute building and occupies a room about 40 by 50 feet in area. The shop has extensive bench facilities for the hand work of hollowing, shaping, and finishing; gas



Fig. 3. One-armed instructor and his one-armed pupils in mechanical drafting.

forge and anvil; nickel-plating equipment; leather department with special sewing machines; a fitting room where plaster casts of stumps are taken and finished limbs adjusted; lathe equipment for metal and woodworking; a drill press; grinding and polishing heads; a band saw, and a sanding machine.

Oxy-acetylene Welding.—Several considerations have led to the choice of oxy-acetylene cutting and welding as one of the trades to be taught. The large growth in this comparatively new process has resulted in a scarcity of welders and cutters. The prospects are good for the employment of a number of trained men, not only in the ship-building industry and in general repair work, but in many manufacturing processes. Wages are very high, considering the degree of skill required. Cutting can be done by a one-armed man, and welding by a man with one good hand and a makeshift for another capable of holding a light strip of adding metal. Welding can be taught in about three weeks, and cutting in a shorter time.

The equipment is simple, consisting of a number of single, portable units, a brick pit for cutting and steel tables for welding. A pair of heavy shears for cutting the

metal strips used in teaching welding and an anvil constitute the only other equipment required.

Mechanical Drafting.—Mechanical drafting offers an attractive occupation for disabled men with certain tastes and capabilities. It can be done without difficulty by men whose powers of locomotion are impaired, but whose arms and hands are normal. Even men with one good hand and a stump of an arm, either with or without a prosthetic device, can do drafting. Men can be trained as tracers in a few weeks and as detailers in a few months.

The present demand for draftsmen is very great and, while conditions may be somewhat changed after the war, in this as in many other occupations there seem to be fair prospects for the employment of trained men at good wages.

The institute is fortunate in securing, as an instructor in mechanical drafting, an engineer who is a one-armed man and who will be peculiarly qualified to help men similarly handicapped to acquire proficiency in this vocation.

Printing.—Instruction in the printing department will be specialized for the present in the operation of the monotype caster. There is a great demand among employing printers for capable caster runners and operators and the present supply is far from adequate.

Runners can be satisfactorily trained in a two months' course, and will be in a position to earn about \$16 a week. In a six months' course men can be trained as full-fledged operators. These workers earn between \$28 and \$30 a week. For the latter work, however, a certain degree of natural ability is prerequisite.

From the viewpoint of the industrial educator, the printing field is a good one for which to train pupils. It stands, in importance, sixth among the industries of the country, and in the New York district ranks third. The employment is not seasonal, and the number of men employed is steadily on the increase.

Incident to the machine instruction, the men will be taught the layout of the type case, elements of hand composition, correction of galleys, and make-up of pages.

Men who have had five years' experience in the printing trade may also be instructed as keyboard operators. This work is practical for any man with two good hands, though one or both legs are missing. The pay of a trained keyboard operator ranges around \$30 a week.

[To be continued.]

Federal Legislation for Vocational Rehabilitation of Disabled Persons

On Monday, April 8, Senator Hoke Smith of Georgia introduced a bill providing for the vocational rehabilitation and return to civil employment of disabled persons discharged from the military or naval forces of the United States.

The United States has been in the war a year, and until the present moment no provision for the vocational rehabilitation of her men has been made, though the necessity has been apparent as an inevitable by-product of the war. Although the United States has seemingly been negligent in this regard, the careful studies which it has been possible to make of foreign experience should prevent the United States from making the early blunders of the allied nations and enable her to start at that high mark of efficiency and service which the other countries have attained only after three years of experience.

Senator Hoke Smith's bill was drafted on the basis of the conclusions drawn from foreign experience and is a bit of far-sighted legislation, preparing for future reconstruction.

Upon the Federal Board for Vocational Education is placed the duty and responsibility of providing facilities, teachers' courses of study, prescribing courses, and in cooperation with the Employment Service of the Department of Labor, the placing of these men in gainful occupations.

As a peculiarly fortunate coincidence, Congress had established the Federal Board for Vocational Education on February 23, 1917, under the Smith-Hughes act, whose function it is to provide vocational education for the youth of the country. Three members of the President's cabinet, the Secretaries of Agriculture, Commerce and Labor, as well as the Commissioner of Education and three appointees of the President, representing manufacture and commerce, agriculture, and labor, constitute the members of the board. This board is peculiarly fitted for providing vocational training for the disabled, representing as it does the vital interests concerned in industrial rehabilitation. The most experienced vocational experts in the country have been gathered together on the executive staff. The machinery for administering a Federal scheme of vocational education is already set up.

Section 5 of the bill states that the men while in the hospital are under the control of the War or Navy Department, but that these departments shall cooperate with the Federal board in providing training and the training of instructors for this training, so that there may be a continuous process of prevocational and vocational training.

"Sec. 5. That all medical and surgical work or other treatment necessary to give functional and mental restoration to disabled persons prior to their discharge from the military or naval forces of the United States shall be under the control of the War Department and the Navy Department, respectively. Whenever prevocational training is employed as a therapeutic measure by the War Department or Navy Department a plan shall be established between these agencies and the Federal Board for Vocational Education acting in an advisory capacity to insure, in so far as medical requirements permit, a proper process of prevocational training and the proper preparation of instructors for such prevocational training.

"The board shall, in establishing its plans and rules and regulations for vocational training, cooperate with the War Department and the Navy Department in so far as may be necessary to effect a continuous process of prevocational and vocational training."

The men will, moreover, be induced to take training by the economic attraction afforded by the Bureau of War Risk Insurance, which provides the monthly compensation equal to the amount received for his past month of actual service, or the amount to which he would be entitled under the Compensation Act, whichever is the greater. The man's family continue to receive their allowance during the period of his training. The bill also provides that any man disabled in the war and entitled to compensation under the War Risk Insurance Act may take, without charge, a course of vocational reeducation irrespective of the fact that without such course he may be able to earn his own living.

Thus the United States has provided for occupation during the patients' convalescence in the hospital. Not only will the desire for independence and self-support be encouraged thus early in the hospital, but the desire for training will have been created.

The training will be of a practical type and be part of a continuous process of training, as it is to be supervised in the hospitals by the same Federal Board for Vocational Education which will provide all future vocational training after hospital discharge.

The men will, moreover, be adjusted to civilian life dur-

ing their training in hospital technical school and factory, as the Federal Board for Vocational Education is a civil government body charged with this great task and peculiarly fitted, by the nature of its organization, to train men for the civil demands of industry.

Compulsory Reeducation a Failure—Military Regime Not Adapted to Prepare Men for Return to Civilian Life

As has been said above, the late start which the United States has made in the field of vocational rehabilitation for disabled men in the national service should enable this country to take advantage of the experience of other nations and avoid their blunders.

No more interesting point has developed in the common experience of nations than the failure of the military regime to complete a disabled man's reeducation. At first it was supposed that military discipline could compel a man to take the training which seemed desirable for him, but it was soon discovered that, while military discipline could compel him to take that training, it could not make a good workman out of him. The training of unwilling pupils, under compulsion, was found to be too costly to the government and without benefit either to the government or the individual men themselves. As the futility of military discipline during reeducation became more and more apparent the value of civilian atmosphere in training the men for civilian life became correspondingly more evident.

Germany, although the most highly militarized nation on earth, has never considered reeducation to be the function of the military authorities, nor has she found compulsory training expedient. The general principle has been established that the imperial German Government, through the war department, should be responsible only for the physical care of the disabled soldier, and that all the responsibility for reeducation and return to industry should be assumed by civil agencies or the various states of the empire.

In Austria-Hungary training is compulsory and under military discipline. It is said, however, that in Hungary it has been necessary to enforce the requirement by withdrawing the pensions of those who refuse training. In Austria since 1915 the army administration has had complete responsibility only for medical treatment and for providing artificial limbs. The final treatment and vocational reeducation are carried out in cooperation with the civil authorities.

Belgium was the first of the allied nations to establish reeducation for her disabled. Training is compulsory, but its efficiency is said to be much hampered by this feature. The *Peuple Belge*, under date of July 22, 1917, says that military discipline has rendered the work at Port Villez a failure. "Men who in time of peace were prominent in business have been put to jobs which they would have told their office-boys to perform. Teachers, professors, and university graduates are reported as being compelled to undertake work fit for primary school children. The total amount of useful work is sometimes, therefore, almost negligible. As a school of reeducation, the institution at Port Villez is said to be absolutely deficient in purpose, its fundamental principles giving no guarantee of success." M. Alleman, director of studies in the great Belgian Institute for Disabled Soldiers, is quoted as saying: "Compulsion should never be employed. In certain schools 80 percent of failures have occurred through misapprehension of this principle."

In France vocational rehabilitation has been placed under the minister of labor. Nominally, reeducation is

compulsory; actually, compulsion seems to be recognized as impractical, and is apparently seldom put into effect.

In Italy a civilian board, under the supervision of the minister of the interior, is charged with the entire supervision of reeducation of the disabled. A combination of the compulsory and voluntary system prevails. The law authorizes the retention of the disabled and crippled for a period of at least fifteen days "if possible" in an institution or school for vocational reeducation. If the man refuses training after the expiration of the fifteen-day period, he is given his discharge from the military authorities. The reason for this combination of compulsion and voluntarism is that, while it was admitted that it would be difficult to gain control over the ignorant and usually illiterate Italian peasants without the aid of military discipline, on the other hand, it was felt that men would not make good subjects for training unless they went into it voluntarily.

In Great Britain vocational reeducation is entirely under civilian control and is never compulsory. The ministry of pensions and the ministry of labor in collaboration provide the schemes of training, which are carried out under the supervision of local committees. The patient is interviewed at an early time in regard to his training and an active system of propaganda is designed to attract the men, and in addition special bonuses and allowances are given to induce the men to undergo training. The men are encouraged to enter and complete training by a bonus of five shillings for each week spent in training. If a local committee is satisfied that a disabled man is not taking advantage of the opportunities provided for him, it may withdraw the training and allowance.

The experience of Canada in rehabilitation has been particularly illuminating. While vocational education was carried on to a large extent by the Vocational Branch of the Military Hospitals Commission, under the direction of Mr. T. B. Kidner, a strong advocate for civilian control of the men during reeducation, the line of demarkation between the civil and military authorities was not definite. In February, 1918, the entire Canadian scheme was reorganized by an order-in-council which created a new civilian department entitled "The Department of Soldiers' Civil Reestablishment," to which was given the entire responsibility of providing and administering the vocational reeducation of all men discharged from medical treatment. Thus vocational training was clearly and definitely taken away from the military authorities.

The reason that vocational readjustment cannot be carried on to advantage by military authorities is very simple. It is that you cannot teach a man to run by making him walk in lockstep. Military life, with its obedience to orders, has a tendency to prevent individual thinking and to crush natural initiative. The extent to which the individual is relieved of the burden (or deprived of the privilege) of thinking for himself can scarcely be realized by anyone who has not undergone the experience.

A wounded Canadian officer gave expression to the stress of readjustment to civilian life when he said that, on his discharge from the hospital, he had for the first time in three years had to assume the responsibility of deciding for himself when and where and what to eat. Yet, when these men enter industry, they must enter as civilians; they must be ready to assume responsibility for themselves. If they are to succeed in industry, they must do more than that; they must be ready to take initiative. This they can relearn to do in a technical school or a factory; they cannot learn it under military discipline.

HOSPITAL, MEDICAL AND SPECIAL MEETINGS

OHIO HOSPITAL ASSOCIATION

Fourth Annual Meeting at Columbus—A War-Time Convention

The program of the Ohio Hospital Association to be held in Columbus, Ohio, May 28, 29, and 30, was received too late for inclusion in the May issue. The convention will be in session by the time this notice appears, but it was felt that the program, which includes many promising papers, should be made a matter of record. A comprehensive report of the meeting, to be prepared by a representative of THE MODERN HOSPITAL, will appear in the July number.

The association, which convenes at the Deshler Hotel, plans to make this a war-time convention, dealing chiefly with problems growing out of the war, and eliminating all unnecessary expense for entertainment, etc.

The meeting will formally open Tuesday, May 28, at 2 p. m. with the address of the president, Mr. F. S. Bunn, superintendent of the Youngstown Hospital, Youngstown. The remainder of the afternoon session will be taken up by a reading of the minutes of the previous meeting by the secretary-treasurer, Dr. E. R. Crew, superintendent of the Miami Valley Hospital, Dayton, and the following papers with their discussion: "The Work of the Woman's Committee, Ohio Branch of the Council of National Defense, in Stimulating Interest in Adequate Nurse Training," by Miss Belle Sherwin, acting chairman; "The Added Responsibility of the Social Service Nurse Brought About by the War," by Miss Stewart, and "The Training of Nursery Maids," by the superintendent of the Jefferson Hospital. Two papers will be read at the evening session, "The Present Status of Hospital Standardization," by Dr. John G. Bowman, director of the American College of Surgeons, and "Compulsory Health Insurance," by Mr. John C. Lapp, director of investigation, Health and Old Age Insurance Commission of Ohio.

President Bunn will preside at the "Round Table Conference on War-Time Economies" Wednesday morning, which will cover the various hospital departments and their economies. The dietetics department will be represented by Miss Sarah Benedict, dietitian of Miami Valley Hospital, and Miss Bertha Beecher of Christ's Hospital, discussing "Mechanical Devices: Serving and Use of Left-Overs, Conservation of Wheat, Meat, and Sugar; Substitutes." E. L. Parish, superintendent of City Hospital, East Liverpool, will speak on "Operating Room Supplies (Dressings, Instruments, Suture Materials, Gauze, Cotton, and Bandages)." The housekeeping problem will be dealt with by Miss Mary A. Jamison, superintendent of Grant Hospital, and Miss C. L. Butterfield, superintendent of Martin's Ferry Hospital. Dr. P. W. Behrens, superintendent Toledo Hospital, and Sister M. Beatrice of Mercy Hospital, Canton, will talk on the "Laundry and Linen Room." Mr. Frank E. Chapman, superintendent of Mount Sinai Hospital, Cleveland, will represent the engineering

and mechanical department. The subject of "The Necessity of Substitutions, Economy in Dispensing, Limiting the Amount of Supplies and Standardization of Methods in the Pharmacy" will be taken up by R. W. Yengling, Ph. C.,



MR. F. S. BUNN,
PRESIDENT OHIO HOSPITAL ASSOCIATION,
Superintendent City Hospital, Youngstown.

pharmacist, Youngstown Hospital. The afternoon session will be devoted to the papers on "Present Day Medical Problems of the State," by Dr. A. C. Freeman, commis-



DR. E. R. CREW,
SECRETARY-TREASURER OHIO HOSPITAL ASSOCIATION,
Superintendent Miami Valley Hospital, Dayton.

sioner of health; "The Relation of the Industrial Commission to the Hospital of the State," by Dr. Fletcher of the State Industrial Commission, and "Mental Hygiene," by Dr. A. C. Baber, superintendent of Dayton State Hos-

pital. A banquet will be held at the Hotel Deshler in the evening, to be followed by an address by Richard P. Borden, chairman of the Hospital Committee of the American Hospital Association, "What Service Can the Civil Hospital Render to the Returned Soldier," and an address on "The Duty and Opportunity of Hospitals in the Rehabilitation of the Handicapped Soldier," to be given by a medical officer of the United States Army.

The convention will close Thursday morning with the report of the committees, the report of the special committee appointed by Governor Cox to make a survey of the hospitals of the state, which is to be delivered by Senator Howell Wright, and the election of officers.

The Third Annual Convention of the Catholic Hospital Association

As announced in our news columns last month, the Third Annual Convention of the Catholic Hospital Association will be held at Chicago, June 18 to 20, in the hall of St. Francis Xavier's Academy, 4928 Cottage Grove Ave.

The subject of the convention will be the standardization of hospitals and the hospital's work in relation to the present world war.

Papers will be read and discussed by some of the leading hospital authorities of the country.

An added feature of this year's convention will be conferences of the executive authorities and heads of the various hospital departments.

The official organization of the convention will be composed of the active and associate members of the association for the year 1917-1918. Representatives of all hospitals of the United States and Canada, and other individuals who are interested in scientific medical work, are, however, cordially invited to the meetings.

The coming convention promises to be by far the most important in the history of the association. The needs that have been emphasized by the present war, and the great movement that is now being carried on by the American College of Surgeons for the standardization of all hospitals, should cause the Catholic hospitals of the United States and Canada to assemble at the 1918 convention in such numbers as to insure an epoch-making event.

Already about one-third the Catholic hospitals of the country have become members of the association in good standing for the year 1917-1918. The remaining hospitals are earnestly urged to join the organization on or before the date of the convention. Such an active interest will manifest to the country the true spirit of the Catholic hospitals in behalf of scientific medical progress.

Dues: active membership (hospitals), \$5; associate membership (individual), \$2.

Conference of Ohio Tuberculosis Hospital Superintendents

A conference of Ohio Tuberculosis Hospital Superintendents was held in Columbus on March 14. It was attended by 18 representatives. Officers elected for the ensuing year were: chairman, Dr. S. A. Douglass, Mt. Vernon; vice-chairman, Mrs. Aloysia Lawin, Columbus; secretary, H. J. Southmayd, Columbus. Meetings of the conference are to be held at intervals of two months.

Mississippi Valley Conference on Tuberculosis to Meet in Ohio

At a meeting of the Central Council of the Mississippi Valley Conference on Tuberculosis, held in Chicago March 13, it was decided to make Columbus the meeting place for this year. The meeting will be held during the latter part of September. The Columbus Society for the Study and Cure of Tuberculosis and the Ohio Society will cooperate in all local arrangements. The officers of the Conference for this year are: president, Dr. Alfred Henry, Indianapolis; vice-president, Dr. W. J. Marcle, Minneapolis; and secretary-treasurer, R. G. Paterson, Columbus.

LETTERS TO THE EDITOR

The Red Cross Hospitals of Japan

To the Editor of THE MODERN HOSPITAL:

I take great pleasure to send you a copy of album of our Red Cross Hospital.

The hospital is situated in the suburb of Tokyo, Shimoshibuya, commanding beautiful views all around it, to say nothing of fresh air and plenty light enjoyed by patients all the time. It was established in November, 1886. The area of the whole ground is a little less than 37 acres, on which comparatively low buildings stand, covering over 4 acres, containing 320 beds in 114 wards inclusive of

private patients' rooms. All the buildings are entirely in one story. The hospital being under Her Majesty's patronage, an allowance is made by her every year. It is usual



Fig. 2. Dr. Seiyu Hirai, surgeon-general and president of the Central Hospital of the Red Cross Society of Japan.

that when she visits the hospital she gives to free patients gowns.

This is what we call "The Central Red Cross Hospital."

圖置配院病社字十赤本日



Fig. 1. Plan of the grounds and buildings of the Central Hospital of the Red Cross Society of Japan. The area of the hospital grounds is 2,394,000 square feet; that of the buildings, 198,720 square feet. There are 320 beds distributed among 114 wards, and housed in sixteen buildings.

Beside this, we have maintained branch Red Cross hospitals over Chosen, Manchuria, and Japan, numbering in all fifteen. These institutions maintain 1,818 beds.

Preparedness in time of war as well as in time of natural calamities such as flood, fire, earthquake, etc., necessitates us to train nurses in all these hospitals. Nurses to be admitted to the training schools within the hospitals must have graduated from high schools and are required to take three years' courses theoretically and practically. Moral instructions are strictly given to them. In the recitation room in which probationers are given lectures upon various subjects, there Florence Nightingale's portrait is hung up on the wall. We have now 558

spare time for the purpose of giving lectures, dramas, and demonstrations to the people. This is the way they are striving for prevention and relief of the disease, as a consequence, the number of the patients is decreasing, more or less. This fact, I think, is fortunate, not only for Japan, but also for the sake of humanity.

Syphilis, which even in small degree of infection greatly decreases national power, is becoming less through the efforts of the government to repress the private prostitute, through the propaganda of secondary education, and through the progress of self-government. This is clearly seen from the statistics of physical examination of young men taken yearly for military service. I feel that the

danger of overlooking the private prostitute is much more formidable than the establishment of public prostitution. At least, since my arrival in this country, I have found that among the causes of insanity, sad to say, must be reckoned syphilis, which produces a considerable number of cases. That this is a big problem which civilized nations of the world are trying to prevent with all their might is a fact which has been known for a long, long time. The discovery of salvarsan might be said to be almost a gospel to the world.

The Cancer Investigation Society was organized a long time ago for the purpose of prevention, treatment, and causal investigation of the disease. Large contributions of money are made to it and prizes are offered for the study.

Serum treatment and physical treatment have made sudden growth

in recent years, and are now competing for recognition with the ordinary methods of medical treatment.

In contrast to the tendency of our medical world, as above stated, the backward elements are the treatment of juvenile offenders, reform education, educational pathology, psychiatry, and others. Although the methods and organizations which deal with these subjects are growing to a certain extent, through popular interest, we do not yet find many noteworthy organizations such as are found here in this country, owing to the weakness of charitable organizations in Japan. Our government took pity on the dependent population, and a couple of years ago officials were appointed for the purpose of the establishment of a national reformatory. They are eager to get results from it. The local charity insane hospital, the only one which we have of the kind, has had an increase of applicants year by year. The rooms and grounds became more and more inadequate. So there is a plan to establish a new one outside of the city with a fund of several million dollars.

Running parallel to the foregoing, different localities have felt the pressing need for the care and treatment of insanity, the most deplorable, pitiable, and formidable of all diseases. There is great eagerness, to establish sanatoriums for the insane. According to the latest statistics of the world, we see that there is one insane person to every two hundred and seventy or so of healthy people. It is indeed an awful social phenomenon to think that this disease has a tendency to increase yearly with the progress of civilization. When we think of the fact that the source



Fig. 3. Central Hospital of the Red Cross Society of Japan.

trained nurses and 1,376 attendants (male). All patients except private ones are admitted free of charge. In time of war, our Red Cross hospitals wholly or partly should take in the sick and wounded. So, in the late two wars with China and Russia, our Central Red Cross Hospital was made one of the military reserve hospitals and treated a great number of those war victims.

The president of the Central Red Cross Hospital and the vice-president are respectively, Dr. Seiyu Hirai, surgeon-general, and Dr. Kichiya Saigo, surgeon major-general.

BARON T. ISHIGURO.

Medical Progress in Japan

To the Editor of THE MODERN HOSPITAL:

As you have conjectured, the progress of medical science in Japan in the last ten years has been wonderful. Japan has made not a few contributions to the medical world of Europe and America. Among others, I may mention the study of the causes and treatment of malaria, diphtheria, "tsutsugamushi" disease, and Weil's disease.

But I regret to say that even now we find there some prevalence of typhoid fever, cholera, plague, etc. It is, I suppose, because of the deficiency of a system of water supply and sewerage such as we find in this country (America).

As for tuberculosis, we have built many sanatoriums in different parts of the country, and the patients are strictly isolated. Each physician's group is striving unitedly to contribute expenses and, even in the hot summer time, to

of a strong nation lies in the health of the population in both soul and body, I think it is a matter of more importance than anything else, to any country and at any time, to eliminate the cause of danger and to let the new generation flourish in healthy condition. This is the significance of psychiatry, the special line of our study.

Medical science in your country is making progress so as to build up a new school. I have heard that psychiatry, in particular, has made wonderful progress. For that reason, I have come over to this country from far, far away.

Your paper is a pioneer in the medical science of the world. With the admirable intention of guiding the physicians, you are trying to collect the studies and opinions

(2) in the establishment of a standing committee consisting of two members of each staff, who are to meet once a month and to make their report to their respective staffs accordingly.

In this way we endeavor to bring about results such as raising the standard of the work done at the hospital; improving the lectureship course to the nurses; increasing our mutual understanding as to the practitioners who give good service and those who do not; and also the elimination of unethical or improperly licensed practitioners from practicing in the hospital.

A. J. FOERTER, M.D.,

President St. Francis Hospital Staff, Peoria, Ill.

Employment for Industrial Cripples

To the Editor of THE MODERN HOSPITAL:

The Red Cross Institute, 311 Fourth Avenue, New York, has been carrying on employment work for industrial cripples during the last five months. A great many of the men who come to the bureau for work have been incapacitated for doing work which requires going back and forth each day on the cars. Many of these men are perfectly capable of work and would be suitable for a position in an institution. Some of them could be information clerks, others could do work in the dispensary and there are a number of other clerical positions that they could fill.

The institute has on its list at present a number of men who are anxious for positions in hospitals and we would be glad to get in touch with any hospital which could use any of these men.

GERTRUDE R. STEIN,

Employment Secretary American Red Cross Institute for Crippled and Disabled Men.

[NOTE.—The work of the American Red Cross Institute for Crippled and Disabled Men is described in this issue by the director, Mr. Douglas C. McMurtrie, in the department, "Industrial Rehabilitation of Disabled Soldiers and Sailors."—EDITORS.]

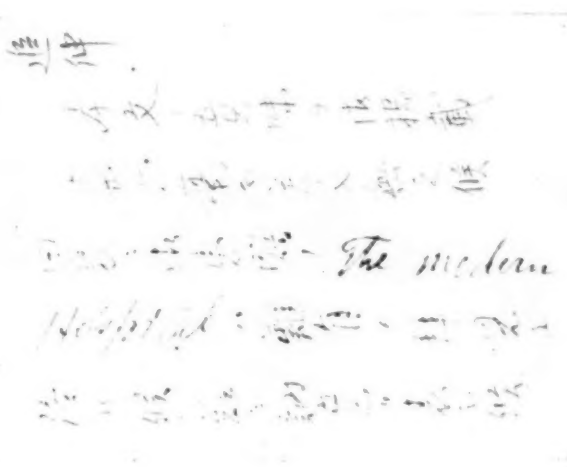
A True Chum

Speaking at the Kennington Theater on Saturday, Lord Denbigh told a nice little story, says the *British Journal of Nursing*. He said that when walking through the House of Commons a few days ago he saw two wounded Australian privates. They appeared to be dwarfs, but on drawing closer he noticed that their legs had been shattered below the knee.

He said to one of them, "Haven't you been fitted with artificial legs yet?" The elder of the two replied: "Yes, I have, and I am going along with them all right, but my pal has not, and as he is a bit shy about going out alone with his stumps, I left my legs behind."

Isn't that just like a true chum?

The Warner Sugar Refining Company, New York, have lately donated to the Flower Hospital a building large enough to accommodate 350 beds, which, after being furnished and equipped by the company, at a cost of \$150,000, will be used as an annex to the hospital. This is the first gift in the campaign recently started by the Mayors' Committee on National Defense, following the request of the government that 20,000 beds, with equipment, in the New York City hospitals be put in readiness for the use of soldiers, seamen, and others in the service of the United States who may be invalided home.



A portion of the original text of Dr. Matsumoto's letter.

of scholars from all the world, I understand. Thus, excited by sympathy, I answer your letter, with a statement of what I have felt.

I am a visitor far, far away from my home, and, being absorbed in the study of special line of learning, I have not material enough to write anything of great value. Moreover, I greatly regret my inability to express my ideas in your language, which I am very fond of writing. So in case I become accustomed to your language, I hope I may write in it from my own experience.

Asking your pardon for my poor writing, and with full regards, I am,

DR. T. MATSUMOTO.

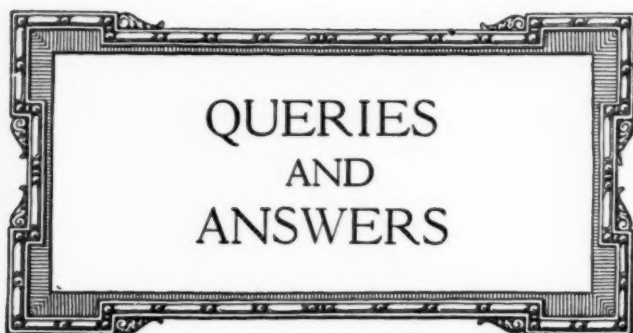
P. S. You are at liberty to publish the contents of this letter in your journal. THE MODERN HOSPITAL which you had given to me some time ago has been read through. I thank you for it.

Hospitals of Peoria Hold a Get-Together Meeting

To the Editor of THE MODERN HOSPITAL:

The medical staffs of the three hospitals of Peoria held a joint meeting at St. Francis Hospital, March 18. The purpose of this meeting was to unify the work of the institution and to promote efficiency.

This was the first meeting of its kind ever held in this city or any other that we know of. We have found that it has a tendency to establish friendly competition rather than any animosity. We have also found that the success of staff meetings is greatly increased, particularly from the standpoint of attendance, when the meeting is held in connection with the luncheon. The joint meeting referred to above resulted (1) in the visiting members getting better acquainted with our own institution and feeling the friendly nature which we entertain toward them, and



Soap and Caustic in the Hospital Laundry

To the Editor of THE MODERN HOSPITAL:

We are in doubt as to the proper mixture of soap and caustic for use in our hospital laundry. Can you tell us what formula other hospitals use?

A HOSPITAL OF THE MIDDLE WEST.

One of the large Chicago hospitals uses a mixture of 25 pounds of soap to 100 gallons of water and 3 pounds of caustic as a routine procedure. At present caustic is not being used, but 10 pounds of soda are substituted for the 3 pounds of caustic to the same quantity of soap and water mentioned above. Hotels are using trisodium phosphate in the proportions of 3 pounds bleach to 25 pounds of soap.

Should Hospitals Be Exempt from Taxation?

To the Editor of THE MODERN HOSPITAL:

Knowing your interest in all questions pertaining to hospitals, I write to ask you the status relative to taxation of hospitals throughout the country.

Some four years ago I went before our county court, also our city council, and persuaded these bodies to remit the taxes against our hospital, with several others, and take these properties off the tax list. Last year we assumed the commission form of city government, and the commission, needing more money, is seeking to put the hospital properties back on the tax list.

What I desire to know is, are the hospitals throughout the country taxed? If not, why not? What does it take to constitute a so-called "charity hospital"?

Our board of equalization meets about the first of April. We will go before the said board and endeavor to persuade it that we should be exempt from taxation.

HOSPITAL ASSOCIATION PRESIDENT.

In our own state, Illinois, hospitals that do charity work are not taxed and it requires 10 per cent of their total treatment of patients to be free in order to enable the hospital to come under this provision.

Hospitals throughout the country, and almost universally, are getting the benefit of exemption from taxation when they do a certain amount of charity work; unfortunately, this clause is a good deal abused and a good many hospitals claim exemption whose only charity work consists of uncollected bills. But the rule is a just one, nevertheless; if a hospital is living up to modern demands, it is the community health center and its resources are expended for the benefit of the public.

We are trying everywhere in the country to make our hospitals better, to raise our standards and to give a service to the sick more nearly in keeping with the times of modern medicine. Already costs of hospital administration are mounting to almost prohibitive heights. Hospitals are no longer boarding houses for the sick. They must furnish very expensive aids to the physician for diagnosis and for the treatment of disease; the cost of equipment is increasing and the demands for more complicated equipment are persistent.

If a community expects that its hospitals shall measure

up to modern standards, the law-making bodies of the community must do their share to make it as easy for the hospitals as they possibly can.

If your commission form of government chooses to tax your hospitals, one of two things must happen: either the quality of service to the sick of the community must be lowered or the hospitals must necessarily be more exacting in charging patients for their care, and this exaction falls on those least able to bear it; in other words, the poor will have to pay when, under a system by which hospitals are exempted from taxation, those who are able to pay general taxes will have to do their part in taking care of the sick poor.

So far as the hospitals are concerned, the problem is as broad as it is long; if they are to keep their doors open they must have money, and unless they get it by exemption from taxation and by funds provided by the state, county or city for the care of the indigent sick, the hospitals themselves must collect the money from patients, rich and poor alike.

If the matter is presented to your commissioners in a broad way they will no doubt meet you more than half way.

The Hospital Laboratory Self-Supporting

To the Editor of THE MODERN HOSPITAL:

In order to bring our hospital up to the standard requirements, we find that we must install a pathological laboratory. The equipment will cost more than we can afford to pay out, and the salary of a pathologist will be a great burden to us, as it is already a question of our keeping the institution on a self-supporting basis, owing to the unusual cost of labor and food and supplies.

Is it fair to ask the small hospitals to meet this requirement in these strenuous times?

SECRETARY OF A BOARD OF TRUSTEES.

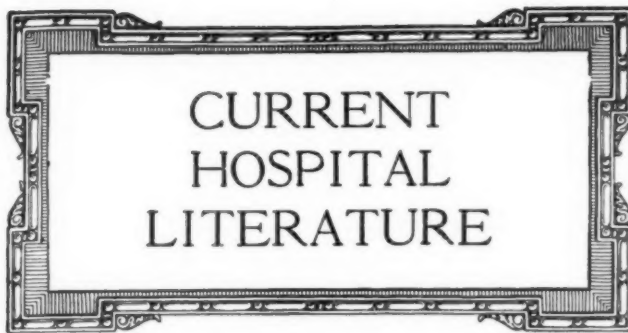
Beginning by answering the end of your question first: It certainly is fair to you and to every other hospital to insist that you have a pathological laboratory. A hospital has no right to admit patients, for either medical or surgical treatment, unless it has the means at hand to make a diagnosis of the conditions treated. Further than that, no hospital takes the proper responsibility for the care of its patients, if it admits to practice any physician who attempts to treat a patient without a proper and thorough diagnosis, and a proper and thorough diagnosis cannot be made without laboratory facilities.

As to your first reason for not wishing to install a laboratory, even small hospitals in small communities have proved that laboratories can be secured and made self-supporting if the hospital and the medical men who bring patients there understand the need and are willing to put enough energy into getting the service.

Cities and county medical societies frequently undertake the expense of laboratory equipment, because their progressive men know that they cannot do good work without it, and after a laboratory is once equipped, the salary of the technician and the cost of supplies and added facilities are easily met by the fees received.

Laboratory facilities will increase the average census of your hospital, and if you do not have them, patients in your city and the surrounding towns will go elsewhere to get proper diagnosis.

The laundry building of the Dayton State Hospital was recently entirely destroyed by fire, which is supposed to have started from spontaneous combustion in the drying room. The State Board of Administration is preparing to have the building replaced immediately, at an approximate cost of \$40,000.



ALBERT ALLEMANN, M. D., Foreign Literature.
Army Medical Museum and Library, Office of the Surgeon-General.
United States Army.

The Tung Wah Hospital, Hong Kong: Some Impressions.
E. M. Browne. *St. Bartholomew's Hosp. Jour.*, London,
1918, XXV, No. 1.

This large hospital, endowed and maintained by the influential Chinese family of Tung Wah, is divided into two large sections. In one the treatment is carried out on modern Western lines, in the other the patients are treated by the old Chinese methods. It is left to each patient to select the division in which he wishes to be treated. The medical wards offer a great contrast to an American or European hospital. A Chinaman objects strongly to a bed in the Western sense. Two trestles, some planks across them, and a good thick quilt are quite sufficient for him. During the day the patient is rarely seen lying in his bed. He is always to be found squatting on one corner of the bed with all the bedding tightly wrapped around him. There are no female nurses, their work being carried out by trained Chinese ward "boys." Beriberi and tuberculosis are the most common diseases. The native physicians of the Chinese division pass some kind of an examination before the hospital authorities, but the ordinary Chinese doctor requires nothing more than a book of prescriptions and an impressive manner. Among the substances used for internal medication may be found such things as dried snakes, crabs' eyes, centipedes, sea-horses, cockroaches, young lizards, etc. It should be mentioned that the number of patients selecting the division carried on on Western lines is steadily increasing.

Exhibition of the Work of the Wounded Soldiers at the Ospedale Maggiore. *Osp. Maggiore, Milan*, 1918, VI, No. 1.

Recently an exhibition was held of the objects made by the wounded and crippled soldiers treated at the great Milan hospital. The exhibit showed a great variety, was most artistically arranged, and was visited by large crowds. The beautifully colored ceramic articles and the division assigned to the products of the blind soldiers attracted special attention. All the objects were sold out in a short time and numerous orders for new ones were given. All the soldiers visited the exhibit and were immensely proud of their accomplishment and of the appreciation they received among the public. The hospital now intends to extend this work and to establish new courses of instruction in various lines.

Assistance of Legitimate Babies of Poor Mothers in the City of Padua. F. Valtorta, *Nipilogia, Naples*, 1917-18, III, No. 3.

For several years past the city of Padua has carried

on a dispensary for the purpose of assisting poor mothers with legitimate children. The dispensary consists of a waiting room, a consultation room, a room for the medical inspector, and a large lecture hall for instructing mothers in the care of their babies. Poor mothers are provided with food, and those that for any reason are unable to feed their children at the breast are supplied with artificial food by the dispensary. During the past year 450 mothers have been given assistance.

The "Star and Garter," Richmond; a Permanent Home for Paralyzed and Disabled Sailors and Soldiers. Sir Frederick Treves. *Am. Jour. Care Cripples, N. Y.*, 1917-18, V, No. 1.

Generous citizens of London bought the "Star and Garter" Hotel on Richmond Hill and presented it to the queen. Her majesty, ever anxious to help the sick and wounded soldiers, at once turned this important building over to the British Red Cross Society, to be devoted to the care of totally disabled soldiers and sailors. The hotel consists of the main building and a large annex. The latter has now been converted into a home for sixty-five paralyzed men. The staff is housed under the one roof, and the home is made complete in itself. The bedsteads are of a special type, and can readily be wheeled about by a nurse.

As the main building was found to be unsuited for a hospital and the costs of conversion would have been very great, it was decided to pull it down and erect an entirely new building in its place. This work is carried out with money collected by the women of England. The hospital will be dedicated, for all time, to the disabled, crippled, and helpless soldiers and sailors. A portion will be devoted to the care of bedridden men, but the larger part of the building will receive men who are no longer able to work or to help themselves. The grounds form a beautiful garden, and the new building will have a large open loggia, where the patients' beds and chairs can be wheeled, and where they will have a magnificent view over the Thames Valley and the glorious wooded country bounded by the Surrey Hills and the Great Park of Windsor.

Transportation of Wounded by Aeroplane. *Osp. Maggiore, Milan*, 1918, VI, No. 1.

Italy is making arrangements to use the aeroplane for the transportation of wounded soldiers. It is expected that the powerful Caproni plane can carry from ten to twelve stretchers, and that a machine can make two trips a day between the Piave front and the city of Milan. Ten of these aeroplanes could thus transport from 200 to 240 wounded a day. It is expected that many wounded men who can only be operated with the surgical facilities of a great hospital will thus be saved.

Treatment and Training of the Disabled at Queen Mary's Convalescent Auxiliary Hospital, Roehampton. D. B. Myers, *Am. Jour. Care Cripples, N. Y.*, 1917-18, V, No. 1.

This hospital was established toward the close of 1915 for the purpose of fitting men who have lost a limb in the war with the latest and most perfect artificial appliances. Lady Wantage took a prominent part in the establishment of this institution. The trades taught in the various workshops include basket-making, light leather work, electrical work, wood-working, motor mechanism and driving, metal turning and fitting, commercial instruction, poultry farming, etc. Every patient is interviewed the day after

he enters the hospital, his industrial history is recorded and his wishes as to the future ascertained. As 40 percent of the men return to their former employers and a further 35 percent, who desire employment near their homes, come automatically under the care of the local committee, it follows that only about 25 percent remain to undergo training at Roehampton. The handling of these men requires great tact. They are sensitive to a degree and are easily discouraged. On the other hand, they respond readily to kindness and to sympathy. It often depends on how a man is handled whether he is made or marred for life. Up to the end of last May 7,230 men have been discharged from the hospital, fitted with their artificial limbs, and of these 6,372 have been dealt with for employment.

Farm Colonies in the Treatment of Tuberculosis. Brit. Med. Jour., London, 1918, I, Feb. 2.

Experience at the Royal Victoria Hospital, Edinburgh, has shown that in a considerable number of cases complete arrest of tuberculosis could not be attained within the ordinary time limit of sanatorium residence. It was found that within four or five years some 50 percent of patients apparently cured had relapsed. The average duration of sanatorium treatment was six months. If under the present insurance act the treatment is reduced to three months the results will be much worse. Even if the duration of sanatorium treatment is not reduced, it would be desirable in from 20 to 25 percent of the cases to continue the treatment in a farm colony. For a certain number of patients the only hopeful outlook after cure is to continue an outdoor life. The work of the Royal Victoria Hospital Farm Colony, established in 1910, has been very satisfactory in spite of the disturbances of the war. Almost all the patients were kept in residence for twelve months and discharged with the disease arrested and with a first-rate working capacity. And these were all cases in which sanatorium treatment even exceeding six months failed to secure decisive results, they were typical cases which would have gone to swell the roll of sanatorium failures.

Hospitals and Vocational Training. Richard P. Borden, Secretary War Service Committee, American Hospital Association. Boston Med. and Surg. Jour., 1918, CLXXVIII, No. 19.

Mr. Borden sums up his conclusions on this subject as follows:

"To insure permanency in vocational training, civilian hospitals should be utilized.

"The need for such training will continue after discharge from military service.

"Military hospitals should be located where there are industrial facilities.

"The training should be in the line of former occupation, therefore men should be returned to hospitals near their homes.

"There will be need of recurrent treatment, so the hospital should continue within reach of the patient.

"The 'general reconstruction' hospital should be permanent.

"There should not be unnecessary duplication for the Army and Navy.

"The money spent in establishing vocational schools should not be wasted. They should be continued for industrial needs, and thus be perpetuated for possible future military service; like universal military training, an element of preparedness.

"Civilian hospitals used for military purposes are avail-

able for discharged men under the War Risk Insurance Bureau and the U. S. Workmen's Compensation Bureau. The vocational schools established in such would be available for triple use.

"Economy and efficiency are satisfied.

"Civilian hospitals can be made to meet capacity requirements.

"Military discipline can be preserved.

"Hospitals are ready to cooperate in vocational training."

BOOK REVIEWS

New and Nonofficial Remedies, 1918. Containing Descriptions of the Articles Which Stand Accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1918. Cloth, pp. 452. American Medical Association, Chicago, 1918, \$1.

This book, too little known in many hospitals, should stand next to the pharmacopoeia on the pharmacy bookshelf. In it are annually listed and described the articles accepted by the Council on Pharmacy and Chemistry of the American Medical Association. An appendix, giving "References to Proprietary and Unofficial Articles Not Described in N. N. R.," makes the volume something like an encyclopedia of unofficial articles, the worthy ones being described in the text and the unworthy being listed in the Index Expurgatorius at the end, which, however, is not exhaustive.

The American Illustrated Medical Dictionary. A New and Complete Dictionary of the Terms Used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Nursing, Veterinary Science, Biology, Medical Biography, etc., with the Pronunciation, Derivation, and Definition. New (ninth) edition revised and enlarged. By W. A. Newman Dorland, A.M., M.D., F.A.C.S. Flexible leather, pp. 1179, with 331 illustrations, 119 in colors. \$5 net. W. B. Saunders Company, Philadelphia, 1917.

Properly, a dictionary should never be reviewed until it has been used a year. Of the American Medical Dictionary, which has been in use for a number of years, it is safe to say that it is one of the most convenient and complete medical dictionaries in existence. For the ninth edition the publishers claim the inclusion of "hundreds of new words not defined in any other medical dictionary now on the market—bar none." Valuable features in this, as in preceding editions, are the indication of capitalization, pronunciation, and etymology.

BOOKS RECEIVED FOR REVIEW

Books received are acknowledged in this department, and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. Selections will be made for review in the interests of our readers and as space permits.

Lessons from the Enemy—How Germany Cares for Her War Disabled. Medical War Manual No. 5, Authorized by the Secretary of War and under the Supervision of the Surgeon-General and the Council of National Defense. By John R. McDill, M. D., F. A. C. S., Major, Medical Reserve Corps, U. S. Army. Flexible leather, pp. 262, illustrated, \$1.50. Lea and Febiger, Philadelphia, 1918.

Laboratory Methods of the United States Army. Medical War Manual No. 6. Authorized by the Secretary of War and under the Supervision of the Surgeon-General and the Council of National Defense. Compiled by the Division of Infectious Diseases and Laboratories, Office of the Surgeon-General, War Department. Flexible leather, pp. 256, illustrated, \$1.50. Lea and Febiger, Philadelphia, 1918.

NEW INSTRUMENTS AND EQUIPMENT

VINCENZ MUELLER, Technical Editor.
GEO. W. WALLERICH, Associate Editor.

Please address items of news and inquiries regarding New Instruments and Appliances to the editor of this department, 327 Southeast Avenue, Oak Park, Illinois.

Universal Water Power Suction Pump

Every laboratory worker, as well as many nose and throat specialists, are familiar with the Chapman filter pump, the latter using them in connection with the Brawley aspirator, as well as for removing blood and mucus during tonsil and adenoid operations, and the surgeons for the same purpose during abdominal or vaginal operations. For this purpose, however, the filter pump really never has produced sufficient vacuum. Gray's Universal suction pump (Fig. 1), which is attached to a faucet and used in connection with one of the well-known Bier's hyperemia apparatus, is an extraordinarily well-designed

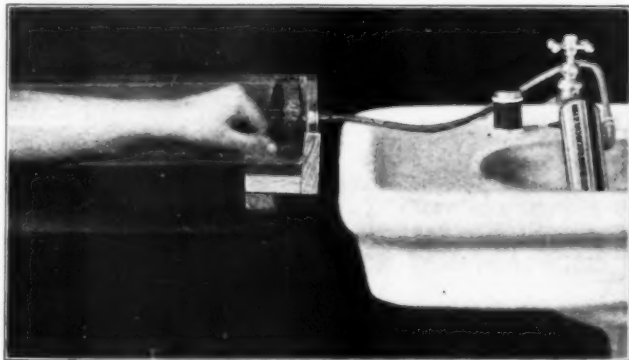


Fig. 1. Gray's universal water power suction pump.

piece of work. This pump has four separate compartments and two central pipes, yet it is cast in a single piece of aluminum.

The manner of fastening the pump to any type or shape of faucet is also unique. A specially constructed interlocking unconvertible faucet washer is used which has four concealed ribs, as well as a peculiarly shaped cross-rib, all of which prevent the rubber connection from turning inside out or slipping off a round or flat faucet after being pushed up as far as it will go. The only care necessary is to see that the faucet is free from grease, soap, or oil when the pump is being attached. When attached to a faucet where there is a water pressure of 25 pounds, the apparatus will produce a vacuum of from 28 to 29 pounds, which is more than is ever needed for any laboratory, surgical, or medical purpose. There is an arrangement by means of which this vacuum can be controlled to a minimum, or used intermittently, as may be desirable in certain massage or cupping operations. On account of its peculiar construction it is not even necessary to use a bottle between the pump and suction tube, as there is sufficient

vacuum direct from the pump to suck in pus or blood clots and pass them on through the suction piece and tubing through the pump into the catch-basin.

Considering the extreme usefulness of this device, the size of which is only 5 inches long and 1½ inches in diameter, the price is very reasonable. The manufacturers

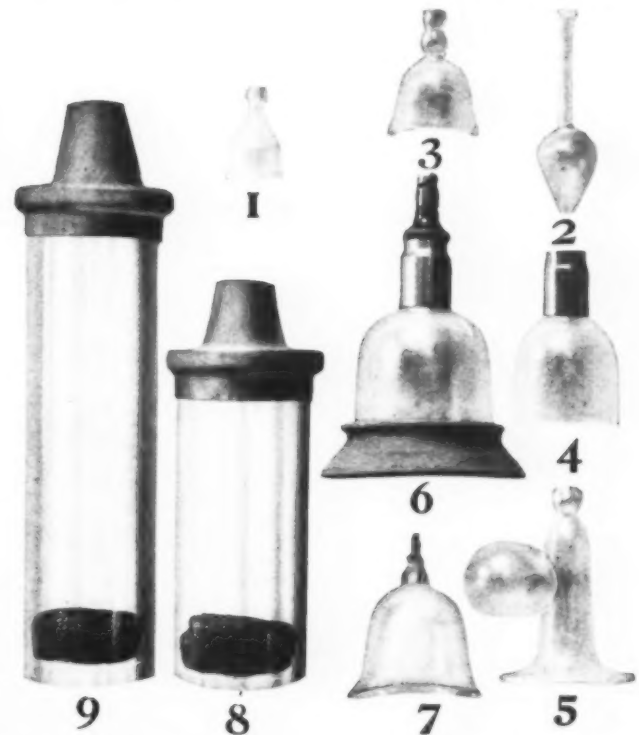


Fig. 2. Cupping, suction, and hyperemia apparatus is for use in connection with Gray's universal suction pump.

are also prepared to furnish, in addition to the different types of suction tubes, all the various sizes and shapes of cupping and hyperemia apparatus, from the smallest for a furuncle to the largest for the trunk, as well as those needed for treatment of hand and arm. Some of these are shown in Fig. 2.

Portable Steam and Formaldehyde Disinfecter

This new type of portable disinfecter is a modification and rearrangement of the "American" Kinyoun-Francis steam and formaldehyde disinfecter so well known to many of the hospitals throughout the country. The idea of a portable disinfecter is not at all new, for it has been used in various forms since 1893, when the first Kinyoun-Francis model was designed and built for the United States Marine Hospital service, as it was then known. Later a number were put into service by the United Fruit Company for mobile disinfecting plants in connection with their large shipping interests. The health departments of the cities of Philadelphia and Norfolk made use of similar apparatus for a number of years. As a portable disinfecting plant it was most complete, meeting the utmost requirements, but the considerable weight and size of the arrangement certainly placed a limit on its field of usefulness. Frequently four heavy horses were required to move the apparatus even on paved city streets. The weight was as much as 12,000 pounds, and the overall length 16 to 17 feet.

A need for a practical mobile disinfecter for the present emergency was immediately apparent, but it must be smaller and lighter than anything yet devised. With the earlier models of the "American" Kinyoun-Francis types

as the basis for further development, the present highly improved type is the result. To F. M. Hartsock, colonel Medical Corps, U. S. army, belongs the credit for the model now used so extensively by our government and which now becomes the object of so much national interest. The illustration shows a complete and compact disinfecting plant, with every facility to be found in a modern stationary plant. The disinfecter is the high-pressure, jacketed, vacuum type, with formaldehyde gas attachment. The chamber is 30 inches wide, 42 inches high, and 80 inches



long inside. A high-pressure steam boiler, also storage compartments for fuel and water, are provided, and the whole arrangement mounted on a steel truck with roller-bearing wheels. The weight has been reduced to close to 8,000 pounds, and the length to about 12 feet, thereby accomplishing most satisfactorily the object sought—light weight and small displacement, so necessary in considering the shipment of hundreds to the fighting fronts. Mobility is now comparatively easy.

Crepe Paper Bandages

The old saying that "necessity is the mother of invention" needs no proof at this late date, and one of the newest applications of the foregoing adage is the appear-



Crepe Paper Bandages.

ance of the crepe paper bandage, a product of the Denison Manufacturing Company. The present high price and scarcity of gauze is due, as we all know, to two con-

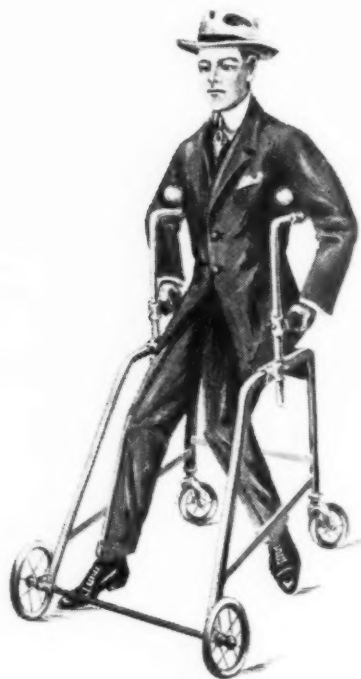
ditions, the ever-increasing demand both at home and across the water, coupled with the shortage and consequent raise in price of raw cotton.

The paper bandage is made from an extra heavy 11-pound crepe stock, is 15 yards in length, and comes in the standard widths used in surgery. An improvement is seen in the increased yardage, eliminating as it does, the handling of several times as many small rolls.

The medical services of our army and navy have adopted the crepe paper bandages, and some of the civilian surgeons who have tried them out, believe that in time crepe paper bandages may replace gauze bandages in hospitals to a greater or less extent.

Adjustable Walking Chair

Recently there was illustrated and described in these columns an improved adjustable crutch. The apparatus here described will make it possible to aid those who temporarily are deprived of the full use of their legs to get about without too great exertion, which will help them to regain the full use of their lower extremities and which will, if necessary, strengthen the muscles of the arms.



McGrath's adjustable walking chair.

As will be seen from the illustration, the weight of the body can rest on the padded spring seat, or on the shoulder supports, and as little or as much weight can be put on the legs as may be desired in each individual case. The padded shoulder supports, hand supports, and the spring seat can be quickly adjusted to fit a man or woman of any size. The chair is not heavy to move about or to carry up and down stairs, is very easy running, and the swivel rear wheels enable the user to guide it at will. The apparatus is equally adapted for indoor or outdoor use. It is white enameled, with nickel trimmings, and built strong enough to stand the hardest usage. For hospitals, sanatoriums, homes, or in fact wherever there is a person who is suffering from paralysis, shell shock, locomotor ataxia, etc., and who does not have perfect control of his or her legs, the McGrath adjustable walking chair is said to be very helpful.

HOSPITAL AND NURSING PLANS OF THE COUNCIL OF NATIONAL DEFENSE

Some of the Activities and Interests of the General Medical Board of the Council of National Defense,
April, 1917-April, 1918

The following statement is extracted from a summary, authorized by the Medical Section of the Council of National Defense, of the report of Dr. Franklin Martin, member of the Advisory Commission and chairman of the General Medical Board of the Council of National Defense, with mention of some of the leading interests and activities of the year of the board and of the medical section, presented at the annual meeting of the General Medical Board, May 5, 1918.

The board has:

Recommended to general hospitals reorganization of staffs, in order to release as many as possible for army and navy service, and urged each person whose services could be spared to apply for appointment.

Classified hospitals exhaustively as to size, convenience to transportation, equipment, and all other details.

Investigated subject of portable hospitals, and recommended purchase of a limited number by the Surgeon General of the Army.

Classified and tabulated for use of Surgeon General's office data as to private houses and large buildings offered for use as military hospitals.

Recommended to War and Navy Departments that zones around camps and cantonments be placed under military control in order to protect troops from venereal infections. Encouraged organization of Fostick Commissions or Training Camp Activities.

Appointed subcommittees on drug addictions, alcoholic control, public health nursing, tuberculosis, and health statistics, which committees have assembled information and recommended definite sanitary measures for guidance of army, navy, Public Health Service, American Red Cross, and civil health agencies.

Work of subcommittee on venereal diseases has expanded, and it has become the Committee for Civilian Cooperation in Combating Venereal Diseases, a general committee of the General Medical Board.

Been instrumental in increasing by 20 percent number of pupil nurses in training schools, by means of correspondence with college and school graduates, deans of women's colleges, school principals, and board of education secretaries.

Distributed about one hundred thousand bulletins and leaflets for information of prospective students.

Made nation-wide survey of country's nursing resources, and urged heads of training schools and hospitals to increase their facilities.

Published series of twelve articles on nursing in newspapers throughout the country.

Been instrumental in having nurses included in War Risk Insurance Law.

Secured evidence of need for military rank for nurses, and secured indorsements of this movement from many persons.

Conducted campaign for increasing number of candidates for nursing education.

Cooperated in preparing details of preparatory nursing course for college graduates at Vassar College.

Recommended to Surgeon General of the Army that increased accommodations for nurses be made at camps, that not less than one nurse be provided to six acutely ill men, that there be a reserve of not less than twenty-

five nurses at each camp hospital, and that a qualified nurse tour military and naval hospitals to make observations; all of which recommendations have been favorably received. Miss Annie W. Goodrich appointed inspector general of nursing service in all military hospitals in the United States and France.

Recommended to superintendents of training schools to speed instruction and hold final examinations and graduations early in 1918, and release graduates for government service.

Cooperated with Red Cross and with National Organization for Public Health Nursing in enrollment of public health nurses in office of Red Cross, and urged public health nursing agencies to release staff members for service in extracantonment zones and for rehabilitation work in France and Belgium.

Cooperated with Food Administration in having public health nurses instructed in preparation of war-time food substitutes.

FEEBLE-MINDEDNESS SAPPING NATION'S VITAL FORCES

More Than Four Thousand Defectives Rejected from New National Army—Five Definite Steps Urged for Community Control of the Feeble-Minded, Viz., Identification, Registration, Instruction, Supervision, and Segregation.

"Feeble-mindedness is sapping vital forces of the nation and is a very real danger to democracy," declared George A. Hastings of New York in an address on "Registration of the Feeble-minded" before the National Conference of Social Work.

"A complete census of the feeble-minded in this country has never been taken, but the number is estimated by reliable authorities at approximately 400,000," he said. "About 12,000 men have been rejected from the new national army on account of nervous and mental disorders; of these, about one-third, or 4,000, were rejected on account of feeble-mindedness.

"Without being a sociological calamity howler, I have the firmest conviction that the community must awake to the importance of controlling feeble-mindedness, or the increasing burden of crime, inefficiency, disease, immorality, and poverty resulting from it will stagger coming generations." Mr. Hastings is executive secretary of the Committee on Mental Hygiene of the New York State Charities Aid Association and was speaking before a conference section on "Progressive Steps in Community Control of the Feeble-minded." Five definite steps were outlined at this section—identification, registration, instruction, supervision and segregation.

Mr. Hastings said that the task of registering the feeble-minded would not be so difficult as it seems at first thought. He declared that if the public schools, courts, probation officers, penal and reformatory institutions, hospitals, and various social agencies would all list their known defectives in a central bureau, and continue the registration year by year, the names, whereabouts, and needs of a very substantial proportion of the feeble-minded population would soon be known, and intelligent programs for their supervision and instruction in the community or segregation in institutions could be carried out.

There is probably one feeble-minded person to every two hundred and fifty of the population. This would give a total of about four hundred thousand for the whole country. New York State alone has an estimated feeble-minded population of about thirty-five thou-

sand, of whom only about one-sixth are in proper institutions. If this same rate of institutional provision prevailed throughout the country (which is probably not the case), only about thirty-six thousand of the nation's defectives are segregated.

"Some states are tackling their problem in earnest, but some states which are progressive in other matters have done surprisingly little along this line, and some have done practically nothing. A practical working program for the various states which would take them a long way on the road to a solution of the problem and mark a new era in dealing with it should include the following:

"An awakened public knowledge and conscience through making the facts about feeble-mindedness more generally known and understood.

"Placing squarely up to each state its responsibility for dealing with the problem and fixing upon a definite policy of establishing and administering its machinery therefor.

"Facilities in the community for the earlier discovery of the feeble-minded.

"A central registration of all feeble-minded in the community, with its data available to all public and private agencies coming in contact with them.

"The establishment of institutions and schools for segregation and training.

"Facilities in connection with courts to determine mental condition of prisoners before sentence.

"Establishment of more ungraded classes in public schools to provide training adapted to the capacity of backward and defective children.

"A system of community supervision for the feeble-minded who can safely be left in the community after being properly trained.

"Continued scientific study of the whole problem of feeble-mindedness."

PRIVATE NURSING IN INDIA

Difficulties of a Nurse in Orthodox Indian Families— Superstitions and Customs of the Different Castes

"The nurse in India who makes up her mind to nurse in orthodox Indian families must be well up in the superstitions and customs prevalent in the different castes, otherwise she is likely to offend unconsciously," says a writer in the *British Journal of Nursing*. "When a nurse just commencing private nursing is sent to nurse in an orthodox Hindu or Parsee house, her troubles begin. She goes on duty with an idea of worry, 'I wonder what it will be like,' and she soon finds out. I will give you an instance:

"Sent to nurse B., a case of phthisis. Two doctors in charge. Hindu by caste. Aged 26 years. Very wealthy. Locality crowded part of city. On my arrival at the house, find the entrance door closed. Knock. On hearing a sound, turn around, when I find dozens of eyes on me. They want to see me first. When they know they have been observed, they back into the rooms. At last someone says, 'Come in,' and the door is opened. I have been passed. Room fairly large and well furnished. Patient on bed. Linen on bed and patient of the finest, but crumpled and dirty to look at. Wonder why? Later on find out that every article sent to the wash must be re-washed by the attendants in the house, and this is the consequence. Surrounding the bed are relatives and friends. I may mention patient a woman. Near the bed, on the floor and on the tables are sputum cups. (These particular ones are made of brass, and shaped like arum lilies.) Friends and relations chewing pan

supari. . . . No chance of them going, even if asked to do so. If one goes, two take her place, and you are never alone. They are all eager to assist if permitted to do so, but usually sit and stare at the sick person and watch your every movement without a word.

"Husband, a broad-nosed, good-natured man, comes into the sick room at intervals; sits on a well-cushioned easy-chair. Immediately he enters the room a hamal (man servant) runs in with the hookah or hubble-bubble, a peculiar kind of pipe, which holds a receptacle of water. When the air is pulled in by the smoker, it sounds like hubble-bubble. This is a pipe somewhat like that smoked by the Persians. The tobacco used is a smelly kind. When you first smell this, you feel you are in a closed chimney and want to fly, but, like everything else, one gets used to it.

". . . Occasionally patient spits on floor, window, or bed-clothes. No idea of cleanliness. Hamal wipes sputum off articles contaminated. I have seen this man going to wipe the cups for my use with this very duster. . . . I made arrangements to get back to hospital for meals.

"Cook a Brahmin, wearing only a loin-cloth or doti (short native trousers, neither cut nor sewn, of cloth, some yards in length, wrapped around the loins and part of the thighs, composed of muslin or other soft material, through which his brown skin showed), the sacred Hindu thread, and that's all, plus contentment. When I ask him for anything, he stands about two feet away and drops it from the height of a foot into my hands, otherwise places it on a table. 'His Majesty' the cook treats me with contempt (being a heaven-born Brahmin). If I happen to touch his person, he cannot eat or touch any utensil without bathing himself first. I have polluted him. I dare not place a foot in the kitchen, otherwise it must be properly washed. Once I did so, and was told it was a sacred place. A peep into the kitchen. Brass vessels as bright as looking-glasses, and everything so clean. These people at times used to take their meals in the kitchen. No dining-table was needed. Low wooden stools about four inches high were placed for them to sit on. The brass "tali," equivalent to our plate, but about four times its size, was placed on the ground in front of them. On this was piled rice, and from four to six small bowls containing a variety of dishes made of vegetables, etc. (but no meat), some highly spiced, others oily, and others again were chutney, the last mentioned being a favorite. They used to fold their legs under them and eat with their hands.

"Although my patient was so young, she had a married step-son aged about 18 years, his wife being about 14 years of age. I used to find it so strange, this young couple would never speak to one another or to friends in the presence of their parents. I never found out the reason for this, but I believe it would have been considered disrespectful to their elders to have done so. The daughter-in-law had to obey any order given by the mother-in-law.

"My patient used to delight in showing me her silk sarees and telling me the cost of each. . . . Her parting gift to me was a lady's gold watch with an enameled peacock on the back, with tail fully spread. This watch, with the emblem of the peacock, was specially given to me for luck, as this bird is considered sacred by the Hindus. I may mention, it was stolen by a pickpocket about a month after receiving it."

An annex to the Henderson (Ky.) Hospital was almost entirely destroyed on May 2 by a fire believed to have been caused by defective wiring.

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This index contains in a single alphabetical sequence the names of authors and subjects of all articles published in THE MODERN HOSPITAL during the six months covered by this volume. The following abbreviations indicate special departments in which articles appeared: Ab., abstract in Current Hospital Literature; Bk. Rev., Book Reviews; Corr., Letters to the Editor; Ed., Editorials; Q. and A., Queries and Answers.

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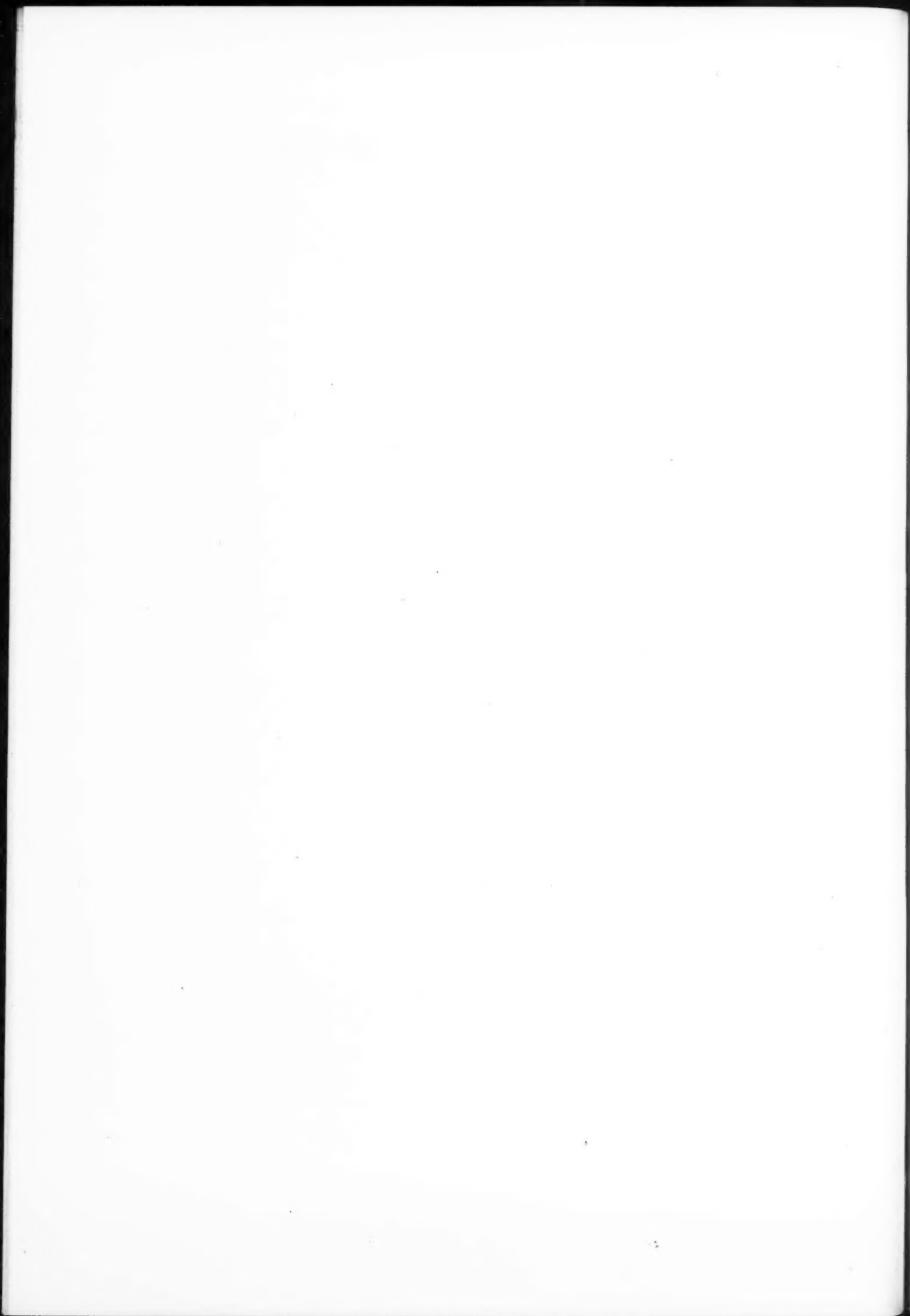
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More of the Popular "Short Cuts"



GLORIFIED RICE

How to Whip Jell-O

Dissolve the Jell-O powder in boiling water as usual. Begin to whip the jelly while it is still liquid—cold but not yet congealing—and whip till it is of the consistency of thick whipped cream. Keep the Jell-O cold while whipping by setting the dish in cracked ice, ice water or very cold water. A tin or aluminum quart measure is an ideal utensil for the purpose. Its depth prevents spattering, and tin and aluminum admit quickly the chill of the ice or cold water. Add cream or whatever else goes into the dessert after—not before—whipping the Jell-O. The whipping process more than doubles the quantity of plain Jell-O, so that when whipped one package of Jell-O serves twelve persons instead of six.

Glorified Rice

The dish shown at the upper left of this page is made of whipped Lemon Jell-O and rice. Following is the recipe:

Dissolve a package of Lemon Jell-O in half a pint of boiling water. Add one-half pint of canned pineapple juice or any fruit juice. When a cold liquid, whip to the consistency of heavy whipped cream. Have two cups of cold boiled rice cooked dry. Fold the rice into the whipped Jell-O. Add one cup whipped cream, four tablespoonfuls sugar, and salt to taste. Set in a cold place to harden.

The whipped cream may be omitted and the Glorified Rice will still be a most delicious dish.

Starting with whipped Jell-O as a foundation, practically every form of Bavarian Cream can be made by using different fruit and without the use of whipped cream or other expensive ingredients.

If you have never whipped Jell-O you will be surprised when you do whip it to discover that you have been missing short cuts, time savers and satisfactory results in making up your desserts.

There are six pure fruit Jell-O flavors: Strawberry, Raspberry, Lemon, Orange, Cherry, Chocolate.

The 1918 Jell-O Book tells about the latest things in Jell-O desserts and salads. It is a beautiful book, full of good things, and will be sent free to any nurse or dietitian who will send us her name and address.

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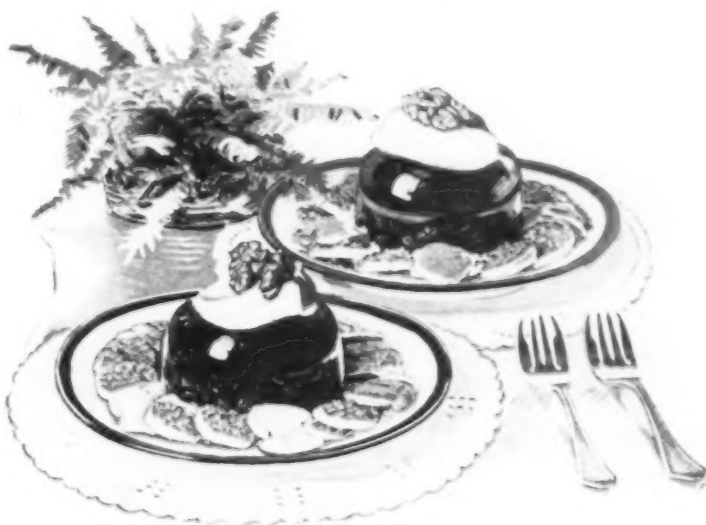
The process is a simple one and once understood is a source of unexpected convenience and comfort.

Take a minute, please, to read the following directions for whipping Jell-O, and then start a series of new experiences in preparing, without fuss, muss or fumble, delightful dishes that are imperfectly described by the stereotyped old words, "tempting," "dainty," "attractive," and even "satisfactory."

Beauty Salad

The recipe following, for Beauty Salad, is one of the simple ones that are so very popular just now. It is made of "plain" Jell-O, without whipping:

Dissolve a package of Raspberry Jell-O in a pint of boiling water and fill individual molds or cups one-fourth full. Coarsely chop three bananas, sprinkle with lemon juice, and add half a cup of English walnut meats coarsely chopped. Put the mixture in the molds and pour on rest of Jell-O when it is a cold liquid. At serving time arrange slices of banana around the turned-out Jell-O and sprinkle them with nut-meats. Serve with salad dressing.



BEAUTY SALAD

The MODERN HOSPITAL

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NEWS OF THE HOSPITAL FIELD

Eastern States

The Mt. Sinai Hospital at Philadelphia has let contracts for alterations to cost \$11,643.

Mrs. M. B. Murchinson, of Boston, has been elected matron of the new Plunkett Memorial Hospital at Adams, Mass.

Dr. Leo Huebsch has recently assumed the duties of assistant superintendent at the Workmen's Circle Sanatorium, Liberty, N. Y.

Miss Margaret Black has been elected superintendent of nurses at the Palmerton (Pa.) Hospital. Miss Beryl Hoover will serve as her assistant.

Miss Elizabeth Springer has been appointed superintendent of the Herkimer (N. Y.) Emergency Hospital, has resigned her position, and will leave the institution June 1.

Plans have recently been made by which the Government will take over the Sea View Farms hospital on Staten Island, N. Y., and the Tuberculosis Sanatorium at Otisville.

The members of Aerie No. 42, Fraternal Order of Eagles, at Philadelphia, have offered their temple to the Government for a hospital, together with the services of their staff physicians.

The directors of the German Hospital at Jersey City, N. J., have proposed to the stockholders that the name of the institution be changed to "Greenville Hospital," and the question is now under consideration.

The Woman's Homeopathic Hospital, Philadelphia, will receive \$10,000 by the will of the late William H. Barnes, who at the time of his death on May 5 was the oldest director of the Pennsylvania Railroad Company.

Dr. William M. Savadoff, formerly of the medical staff of Berks County Tuberculosis Sanatorium, Reading, Pa., has been appointed superintendent of the Philadelphia Jewish Sanatorium for Consumptives at Eagleville.

May 1 was the fiftieth birthday of the Connecticut Hospital for the Insane, at Middletown. During the half century of the existence of the institution, its capacity has increased from 85 to more than 2500 patients.

Dr. William H. Hanckner, superintendent of the Delaware State Hospital for the Insane at Farnhurst, having recovered from a recent illness, has returned to the institution from Atlantic City, where he had gone for a rest.

By the will of the late John B. Manning, formerly a broker of New York City, St. Vincent's Hospital received \$25,000, St. Francis' Hospital, \$10,000, St. Joseph's Hospital for Consumptives, \$10,000, and Misericordia Hospital, \$2,000.

In commemoration of his twenty-seven years of service at the Wills Eye Hospital, of Philadelphia, Dr. Samuel O. Risley, of that city, was presented with a silver loving cup at a dinner given in his honor on May 2 by fifty of his friends.

Miss Isabelle Price, a nurse at the Franklin Dispensary, Johnstown, Pa., and formerly night superintendent of the Cambria Steel Company's Hospital, of that city, has announced her engagement to Mr. Thomas Holton, of Pittsburgh.

In order that mothers and children may be more generally informed of the correct food habits and health knowledge, the Teachers' College, of New York City, is now



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giving a special course to volunteer students, who, after completing the course, will work in recreation centers, summer schools, and hospital clinics under the direction of a specially formed nutritional committee. Miss Abigail A. Freeman is in charge of registration.

At the recent graduation exercises of the training school of the Swedish Hospital, Minneapolis, \$10 in war saving stamps was presented to each of the twenty-nine graduates by the hospital board and the authorities of the training school.

The Raleigh-Wyoming Hospital has recently been incorporated at Mullens, W. Va., with a capitalization of \$50,000. Dr. J. E. Coleman, of Beckley, Dr. W. L. Hunter, of Mullens, and others are interested in the project, and will erect a 100-bed hospital.

An organization which conducts a large sanatorium in Brooklyn, N. Y., has expended about \$100,000 in the purchase of a 171-acre farm near West Goshen, Conn., on which they propose to erect a 300-bed brick building to be used as a tuberculosis sanatorium.

Work will soon be started on a \$50,000 addition to the House of Providence Hospital, Holyoke, Mass., the basement and ground floor of which will be equipped as a laundry, while the upper floors will furnish rooms for persons connected with the institution.

The West Virginia State Board of Control is contemplating the establishment of a tuberculosis sanatorium for negroes at Denmar. Dr. B. A. Chrichlow, of Charleston, has been appointed by Governor Cornwall to act in an advisory capacity in connection with the project.

The industrial plant of the Danville (Pa.) State Hospital for Insane, in which hosiery, underwear, and other articles were made for the inmates, was destroyed by fire May 10, entailing a loss estimated at \$425,000. Much valuable machinery was ruined. The cause of the fire is not known.

Miss Charlotte M. Perry, who has been superintendent of the Malden (Mass.) Hospital for the past seven years, has resigned her position to take charge of the Faxon Hospital, of Utica, N. Y. Miss Rachael McEwen, a graduate of the Massachusetts General Hospital, Boston, will succeed her.

Mr. John E. Fay, for several years assistant superintendent of the Hartford (Conn.) Hospital, and more recently superintendent of the John Sealy Hospital, of Galveston, Tex., has been appointed superintendent of the Ellis Hospital at Schenectady, N. Y., to succeed Mr. O. D. Ogsbury, who has resigned.

The South Baltimore General Hospital, formerly the South Baltimore Eye, Ear, Nose, and Throat Hospital, has recently been opened to the public. The building will accommodate fifty patients, and has special medical and surgical wards. Dr. Novak is surgeon-in-chief, Dr. Onnen, assistant surgeon, and Miss Amy Nesbit, superintendent.

Dr. Geza Kramer, for twenty-one years connected with the New York City Health Department and for six years medical inspector in charge of the tuberculosis admission division of the Bureau of Preventable Diseases, has recently been appointed medical superintendent of the Sea View Farms, Staten Island. He succeeds William B. Buck.

Ground has been broken for a \$150,000 addition to the Monmouth Memorial Hospital, Long Branch, N. J. The structure is the gift of Charles A. Wimpfheimer, New York, as a memorial to his nineteen-year-old son, who died of pneumonia in a military hospital at Hoboken. He was enrolled in Ambulance Company No. 1, of Red Bank, N. J.

Mrs. Frances Berhurst, who has lately been installed as superintendent of the Newark (Ohio) City Hospital, is planning a number of improvements, one of which is to increase the enrollment of nurses in the training school from fifteen to twenty. Mrs. Berhurst came to Newark from Akron, and has had hospital experience in several southern cities. She is a native of Chatham, Canada.

The new Israel Orphan Asylum, 274-280 Second Street, New York City, was formally opened May 1 by its president and founder, Mr. Gustave Hartman. The new home, which will provide a shelter for Jewish orphans and war

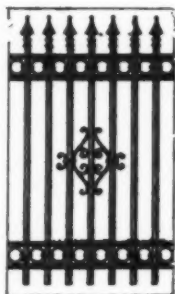


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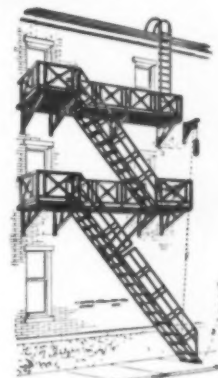
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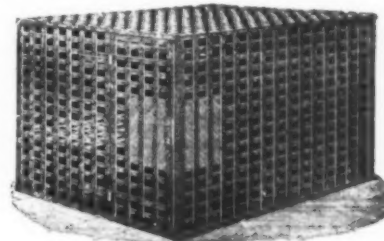


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Chicago

(1919)

babies, is a five-story building with roof garden, and was erected at a cost of \$150,000. Miss Jennie G. Fisher, who has had 17 years' experience with children's institutions, will be in charge.

A new U. S. Base Hospital at Fox Hills, Staten Island, N. Y., three miles and a half from St. George, with accommodations for 3,000 sick and wounded men, was completed in May under the direction of Colonel C. A. Simonds. The plant at present consists of seventy-five buildings, streets and sewers, and a railroad connecting with St. George, and is so arranged that provision for 6,000 patients could be made in a short time.

The homeopathic women physicians and surgeons of the United States have organized a National Women's Homeopathic Hospital Unit, which plans to equip and maintain a 100-bed hospital with the necessary complement of ambulances, for use behind the lines in France. Dr. Florence M. Ward, of San Francisco, is chairman of the unit, and Dr. Cornelia C. Brant, Dean of the New York Homeopathic Medical College for Women, is treasurer. On the executive committee are Dr. Cora Smith King, of Washington, Dr. Margaret Hassler, of Reading, Pa., and Dr. Julia C. Strawn and Dr. Sarah M. Hobson, of Chicago.

A large reception on May 7 marked the opening of the new home of the Washington (D. C.) Eye, Ear, Nose, and Throat Hospital, 2517 Pennsylvania Avenue, Northwest. The building is a large four-story structure, the first floor of which furnishes a free clinic and pathological rooms; the second floor, an office, library, reception hall, and x-ray, microscopic, and refractory rooms; the third floor, private-patient rooms, diet kitchens, and utility and chart rooms; while the fourth floor is given over to the operating department, sterilizing division, surgeons' laboratory, sun parlor, and nurses' quarters. This hospital is a non-sectarian charitable institution, and is supported wholly by voluntary contributions.

Mr. Louis C. Willis, vice-president of the Williamsburg Hospital, Brooklyn, N. Y., has recently announced that plans for the erection of a new home for the institution will be immediately pressed forward. To the \$200,000 appropriated some time ago for this new building the endowment fund of \$100,000 will be added, and also about \$50,000, which the directors expect to realize from the sale of the old property. This amount has been necessitated for construction purposes by the increase in labor and building materials. It is hoped to have the new establishment completed within a year. In the meantime, the patients of the hospital will be transferred to the Brooklyn Eastern District Hospital across the street, as soon as beds are available.

Plans are well under way for the erection of a new ten-story building for the People's Hospital, New York City, on its present site at Thirtieth street and Second avenue, to cost \$250,000. This project will be financed by prominent East Side citizens, and comes as a result of a report of an investigation by Dr. William J. Sirovitch, superintendent of the institution, into the conditions of the district, which showed an urgent need of larger and better accommodations for the neighborhood's sick and underfed. This investigation was agitated after the recent drafts, when large numbers of men in this part of the city were rejected because of physical disability. At a recent meeting of fifty-five citizens interested in the undertaking, Julian Goldman was elected president of the new hospital association, and Lewis Krohnberg and Irwin Scherr were made vice-presidents. All three men have subscribed \$10,000 each.

Middle States

The St. Anthony's Hospital, Rock Island, Ill., recently celebrated the twenty-fifth anniversary of its founding.

The Walnut Street Hospital, Blythesville, Ark., has recently been opened, with two trained nurses in charge, building.

Letters of incorporation have been granted to the Wilson Maternity Hospital, Duluth, Minn., with a capitalization of \$50,000.

The Fair Oaks Sanatorium, Wadena, Minn., was formally opened in May. This institution has been erected at an approximate cost of \$35,000 by Wadena and Todd



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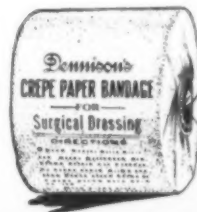


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counties. The staff of the sanatorium consists of Dr. LeCates, resident physician; Miss Gertrude N. Talbott, of Syracuse, N. Y., superintendent, and two trained nurses.

The Ravenswood Hospital, Chicago, launched on May 15 a drive for funds to build a 175-bed addition and to enlarge its nurses' school and quarters.

A permit has been granted for the erection of a \$40,000 administration building for the South View Municipal Hospital, Milwaukee, Wis.

Dr. A. E. Kepford, lecturer on tuberculosis for the state of Iowa, is helping the authorities of Woodbury County to establish a tuberculosis sanatorium.

The John Robinson Hospital, Allegan, Mich., was damaged, May 2, by a fire which started in the roof. The loss is estimated at several thousands of dollars.

Dr. M. F. Ford, proprietor of the Ford Hospital, Omaha, Neb., who has been seriously ill from a pneumonia attack, is reported to have entirely recovered.

A campaign to raise \$10,000, to be used in equipping the Julia Rackley Perry Memorial Hospital, a new institution at Princeton, Ill., is now being conducted in that city.

Miss Ida Lindstedt, R. N., has resigned as superintendent of the Goshen (Ind.) Public Hospital, and has returned to her home at Seattle, where she will soon be married to Mr. C. W. Johnson, a real estate broker of American Falls, Idaho.

A large annex to the Mercy Hospital, Benton Harbor, Mich., was formally opened May 1. The new addition affords spacious sun parlors, fully protected, for the use of convalescent patients, and is equipped with modern conveniences.

Dr. L. T. Sidwell, assistant physician at the Lincoln (Neb.) State Hospital for the last two years, has been appointed superintendent of the Nebraska State Tuberculosis Hospital at Kearney, to succeed Dr. L. S. B. Robinson, resigned.

Contracts have been let for the construction of a new 150-bed addition to the St. Anthony's Hospital, Rock Island, Ill., and the work will be carried to completion as quickly as possible. The structure will be six stories high and will cost \$200,000.

A large building, formerly used as a hotel, on a farm just outside the city of Columbus, O., will soon be converted into a hospital by Dr. George T. Harding, Jr., of Columbus, and others, who have incorporated with an authorized capital stock of \$10,000.

Miss Violet M. Jensen, of Chicago, has been appointed superintendent of the Blue Mound Sanatorium at Wauwatosa, Wis. Miss Jensen is a graduate of the Hahnemann Hospital Training School, Chicago, and has had hospital experience in several other cities.

At the instigation of Mrs. Mary Muff, superintendent of the Nurses' Training School of the Kalamazoo (Mich.) State Hospital, and her assistant, Miss Lucy Halliday, fifty student nurses have registered for war service with the Woman's Committee of the Council of National Defense.

Miss Anna Kandel has been elected superintendent of the City Hospital at Springfield, Ohio, to succeed Miss L. J. Napier, who has recently resigned. Miss Kandel is a graduate of Columbia University, and was formerly superintendent of nurses at the Jewish Hospital in Cincinnati.

A new home for the Mansfield (O.) General Hospital was formally opened in May, with Miss Matilda Linsky, formerly superintendent of the emergency hospital, serving as superintendent, and Mrs. Ranie Abernathy as housekeeper. This institution will also soon have a new nurses' home, bids for its construction having been let in May.

Dr. E. O. Richardson, owner of the Orchard Hospital at Marion, O., has bought the furniture and equipment of the former Marion General Hospital from Dr. J. O. Starr, and has also secured a lease on the building. The Marion General Hospital closed its doors some time ago, since which time the Orchard Hospital has been the only one in that city adapted to caring for the general needs of the



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Sealed in huge guns, the grains are revolved for 60 minutes in 550 degrees of heat. That means matchless cooking.

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Puffed Corn Rice Puffs Puffed Wheat

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Thus every food cell is blasted. The grains are puffed to airy, toasted bubbles, thin and crisp and flimsy. They are delightful morsels. And perhaps thrice better cooked than the average grain food.

The Rice and the Wheat are whole grains. The Corn Puffs are pellets of hominy puffed.

Where ease of digestion is in question, these are ideal grain foods.

community, and owing to the heavy demands made upon it, was not sufficiently equipped to care for all of its patients. By combining the two institutions in the larger building and increasing his nursing staff, Dr. Richardson expects to have one of the best hospitals in that section of the state.

The St. Luke's Hospital Association, of Cleveland, O., has recently purchased two tracts of land adjoining the present hospital grounds to be used for expansion purposes. The two tracts include one parcel 44 by 167 feet on Carnegie avenue, and another 188 by 167 feet fronting on Cedar avenue. The association now owns approximately four acres of land.

The Greenville (Ohio) Hospital Company has abandoned its original plan of erecting a new building for a community hospital, and has purchased a fourteen-room residence, which will be remodeled for hospital purposes. It is reported that \$14,000 was subscribed toward the establishment of this institution, \$6,500 of which has been expended in this recent purchase.

Miss Elizabeth Springer has been appointed superintendent of the Huntington (Ind.) County Hospital, to succeed Mrs. Ethel Jackson Price-Jones. For the last sixteen years, Miss Springer has been connected with the Hope Hospital at Fort Wayne, which has recently closed its doors, and she was at one time employed by the Royal Victoria Hospital in Montreal, Canada.

A monthly report of Dr. John Stewart, superintendent of the Arkansas Tuberculosis Sanitarium at Booneville, filed in the governor's office, May 10, shows that there were 131 patients in the institution, that the milk production from the sanitarium's dairy was 1,663 gallons, produced at a cost of fourteen and one-fifth cents per gallon, and that 15,390 meals were served at a cost of twelve cents a meal.

On May 3, Dr. James I. Tyree was appointed superintendent of the Kansas City (Mo.) General Hospital, and Mr. Charles Surface was made business manager. Dr. Tyree entered the institution six years ago as an intern, and for several years has been associated with the emergency department. Mr. Surface has been the business manager of the Christian Church Hospital, of that city, for the last year.

Miss Astrid Hofseth, formerly superintendent of the Provident Hospital and Training School, Chicago, has accepted the position as superintendent of nurses and assistant superintendent of the Nebraska Methodist Hospital, Omaha, a 200-bed general hospital with a training school of ninety pupil nurses. She is succeeding Miss Amy Allison, who is now instructor of nurses at the Stuart Circle Memorial Hospital, Richmond, Va.

The Ways Sanitarium, Fort Wayne, Ind., is being reorganized under the joint management of the Methodist Hospital Association of Indiana, operating the Methodist Episcopal Hospital in Indianapolis, and the Hope Hospital Association, of Ft. Wayne, and will hereafter be known as the Hope Hospital. As a part of the agreement between these two organizations, the people of Fort Wayne are required to furnish the sum of \$100,000, while the Methodist Hospital Association must provide \$125,000, to pay for the property. Rev. T. J. Johnson will have charge of the campaign to raise the local contribution and will give his attention to the financial problems of the institution until this obligation is entirely discharged. The campaign is to be timed so as not to interfere in any way with the government's war work. The project itself, however, savors of a war enterprise, for the reason that this hospital has been selected by the government to help care for both civil and military employees in the service. In June, 1917, the former Hope Hospital leased the building, in which it will now be conducted, and at that time became known as the Ways Sanitarium, an agreement having been made by which Dr. A. H. Macbeth, who erected the structure, was put in charge of the institution.

Southern States

A general hospital is to be erected at Morehead City, N. C., at an approximate cost of \$15,000.

The North Carolina School for the Deaf and Dumb, Morganton, N. C., is planning to erect a two-story in-



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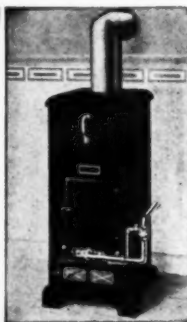
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firmly building of reinforced concrete, at an approximate cost of \$25,000.

A new hospital for contagious diseases at Norfolk, Va., will be erected in the near future at a cost of \$30,000.

Six thousand dollars will soon be expended in improving the building of the Charleston (W. Va.) General Hospital.

The South Highland Infirmary, Birmingham, Ala., has let contract for a three-story brick addition to cost \$20,000.

At a recent election in the city of Yeakum, Tex., \$50,000 was voted for the purpose of establishing a municipal hospital.

The Chesapeake & Ohio Railway is considering plans for the erection of a new \$250,000 home for its hospital at Huntington, W. Va.

Plans for the erection of a \$130,000 city hospital at Little Rock, Ark., were adopted May 3, and work on the structure will begin immediately.

Plans for the opening of a \$20,000 hospital at Florala, Ala., are now under consideration. Dr. Ferrin Young, of that city, is interested in the project.

The Dallas City and County authorities have let contracts for the building of a laundry on the Woodlawn Hospital grounds at a cost of about \$10,000.

The West Virginia Board of Public Works has decided upon the immediate erection of two new units for the State Sanatorium for Tuberculosis, at Terra Alta, to cost about \$20,000.

Dr. Lee Smith, of Doyle, Tenn., has been appointed superintendent of the Eastern Hospital for the Insane at Bearden, Tenn., to succeed Dr. E. W. Mitchell, who has recently resigned.

Contracts have been awarded for the erection of the State Negro Hospital for the Insane at Rusk, Tex., which will cost about \$300,000. Construction work will begin immediately.

The Order of the Good Samaritans, a colored fraternal organization, will soon begin work on a \$10,000 hospital at Athens, Ala. Over \$3,000 of the money is in hand, and the remainder is in sight.

The St. Luke's Hospital, of Richmond, Va., closed its doors last month, but will be reopened in September as a part of Richmond College, which has been taken over by the Government for a base hospital.

The Walnut Street Hospital, Blythesville, Ark., has recently been opened, with two trained nurses in charge, two in Memphis on call, and two undergraduates, who will go out on cases not needing a professional nurse.

The House of Representatives has approved a \$10,295,000 appropriation for temporary naval hospitals as follows: Norfolk, Va., \$1,250,000; Hampton Roads, Va., \$500,000; Charleston, S. C., \$850,000; Paris Island, S. C., \$175,000.

Drs. W. P. Watson, J. G. Price, S. B. Sharpe, A. H. Moody, and C. T. Nash, Jr., all of Dyersburg, Tenn., have been granted a charter to establish a \$15,000 hospital in that city. Dr. E. M. Holder, of Memphis, and Dr. J. A. Graham, Chicago, will be on the staff as consulting surgeons.

The Harrison Hospital, Cynthia, Ky., has been reorganized, and will now bear the name, "New Harrison Hospital." About a year ago a campaign was started to raise \$10,000 to pay off a \$6,500 debt of the old hospital association and to make some necessary repairs so that the new institution might be reopened without handicaps, and this fund was completed in April.

The Clarksville (Tenn.) Hospital Company has recently announced that, following the resignation of Miss Brooks, superintendent of the Barbara Louise Hospital of that city, Miss Johnson, formerly in charge of the third floor of the St. Thomas Hospital at Nashville, has been appointed to fill the position. The name of the hospital has also been changed, and will hereafter be known as the Clarksville Hospital.

The cornerstone of an addition to the Georgia Baptist Hospital at Atlanta was laid May 5. The building, when



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Sheets and Pillow Cases, Towels and Towelings
especially adapted for hospital use

CURTAIN MATERIALS

ESTIMATES OF COST WILL BE SUBMITTED UPON REQUEST

WHOLESALE DEPARTMENTS

Fifth Avenue - Madison Avenue, New York

Thirty-fourth Street

Thirty-fifth Street

Cerelene

*A neutral wax treatment
for burns—
Holliday formula.*

CERELINE (Holliday) is a pure, neutral product compounded by an expert in the chemistry of waxes, and whose effort has been to achieve the utmost in the physical qualities which are desirable in a wax for the treatment of burns. It is more than a mere mixture, and, because of the special process of manufacture and its absolute neutrality, it is an ideal wax dressing.

The experience of surgeons and physicians of highest professional position, the investigations in civil, industrial and military hospitals, and the critical evaluation which has been made by medical officers of the army, that **CERELINE** is deserving of the favorable consideration of the entire medical profession and hospital officials generally.

CERELINE, so far as we know, is the only wax dressing that has been ordered in large quantity by government officials for use under the direction of medical officers of the army. It has been employed extensively and with uniformly satisfactory results in the first aid stations and emergency hospitals of many of the largest manufacturing plants of this country, and it has proved to be equally efficient in the routine treatment of burns and wounds in the services of many civil hospitals, as well as private practice.

Full particulars concerning **CERELINE**, its method of application and clinical records, furnished on request. Write

H. J. BAKER & BRO.

Established 1850

81 FULTON STREET NEW YORK CITY

completed, will contain fifty-five rooms, thus doubling the present capacity of the institution. One of the interesting features of the ceremonies was the unfurling of a service flag containing twenty-five stars, each representing a nurse, physician, or an intern of the hospital who has enlisted for war service.

A tuberculosis hospital for Macon, Ga., is now assured as the result of a series of meetings held in that place last month, under the direction of Dr. J. P. Faulkner, of Atlanta, who is the director of the division of tuberculosis of the state board of health. Reports of committees brought to light that in that city there are at present more than 100 cases of tuberculosis and that one out of every nine deaths during the past year has been due to this disease.

Rocky Mountain and Pacific Coast States

The Porter Sanitarium, capitalized at \$10,000, has been recently incorporated in Los Angeles.

Miss Maude V. Muncie, R.N., will open a new hospital at Harlowtown, Mont., in the near future.

It is reported that the German Hospital, of Los Angeles, Cal., has changed its name to "Lincoln Hospital."

Plans are under consideration for the enlargement of Dr. Hyman Lischner's child sanatorium, San Diego, Cal.

The Hamilton (Mont.) Hospital, which was closed some time ago, will reopen its doors to the public at an early date.

It is reported that the Canadian Red Cross contemplates establishing a convalescent home for wounded soldiers in California.

Mrs. Etta M. Henchey, owner of the Modern Maternity Home, Salt Lake City, has selected a new site for her hospital on which she expects to erect a suitable building this summer.

The contents of Dr. A. L. McClanahan's Hospital at Ellensburg Wash., were damaged last month to an extent of \$19,000 by a fire that is believed to have started in the X-ray room.

The surgical wing of the Southwestern Presbyterian Sanatorium at Albuquerque, N. Mex., was damaged to the extent of \$5,000 and several cottages for tubercular patients were burned to the ground by a fire which started from an overheated stove in one of the cottages on May 1.

Canada

Calgary, Alta., has been selected by the Canadian Government as the location for a large government tuberculosis hospital.

The Board of Control, Toronto, have authorized the expenditure of \$38,500 for improvements on the Hamilton Hospital, of that city.

Miss Bertha Miller, superintendent of the Amasa Wood Hospital, of St. Thomas, Ont., and Miss Mary E. Stewart, assistant superintendent and head nurse, resigned their respective positions in May.

It is proposed that the Dominion Government and the province of Alberta each contribute \$200,000 for the purpose of erecting a 300-bed sanatorium in the foothills of the Rockies. When it is no longer required for military purposes, the institution will become the property of the province.

The Royal Columbia Hospital, of New Westminster, B. C., has just opened a military annex for the care and treatment of three hundred soldiers. The management at present is under the control of the Royal Columbian Hospital administration, who supply the service. The medical care or attending staff is appointed by the militia department.

Lieut. Col. W. B. Hendry, D. S. O., has been appointed commanding officer of a group of hospitals in Toronto, including the Spadina Military Hospital, and the military wing of the Toronto General Hospital, which has been increased to 250 beds. Col. Hendry has been in command of the Base Hospital at Basingstoke, England, for the last several months, and was formerly in command of No. 4 Base Hospital at Saloniki.

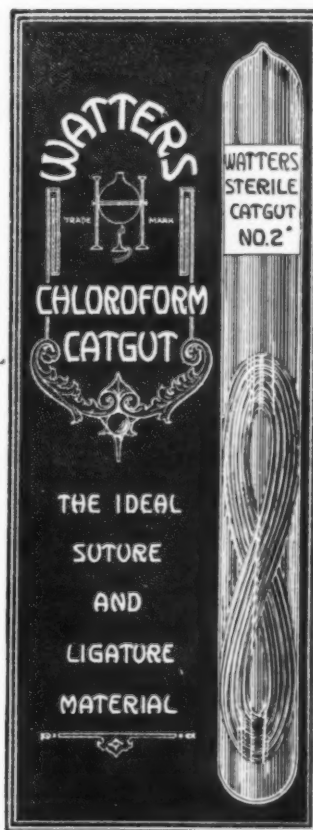
WATTERS CHLOROFORM

"The Ideal Surgical Catgut"

SINCE the war began literally millions of feet of Watters Catgut have been employed by the armies of the Allies without a single complaint. Such a record has never been equaled by any other product.

IN the fourteen years since Watters Catgut was first discovered not a single tube has ever been proven other than absolutely sterile.

SUCH a record carries conviction to the discriminating surgeon.



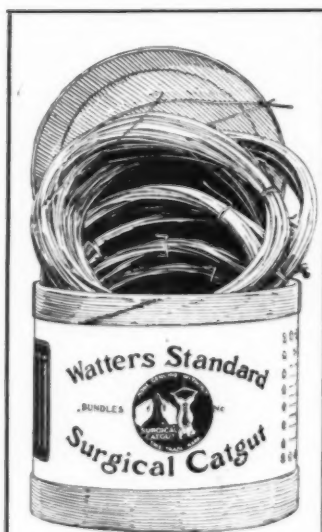
STANDARD CATGUT

"Safety in Surgery"

THE advantages which the Watters Catgut possesses are briefly these:

- First. Absolute sterility.
- Second. Unlimited keeping qualities.
- Third. Maximum of tensile strength.
- Fourth. Extreme pliability.

THE Catgut is put up in hermetically sealed glass tubes containing either 60, 30 or 18 inches. All sizes, plain and chromic.



Finest Quality

Genuine Surgical Catgut

Greatest tensile strength. Each strand smooth and uniform. This gut can be kept indefinitely without damage. Each string 10 feet long; 10 strings to the coil; 10 coils to the box.

Size	Price per coil	Price
000		\$0.55
00		.57
0		.65
1		.83
2		.95
3		1.25
4		1.10
5		1.45



Watters Surgeons' Silk

White or Black

Twisted on cards, per dozen	\$ 0.60
Braided on cards, per dozen	1.10
Twisted on 1/2-oz. spools, per doz.	8.40
Braided on 1/2-oz. spools, per doz.	15.20



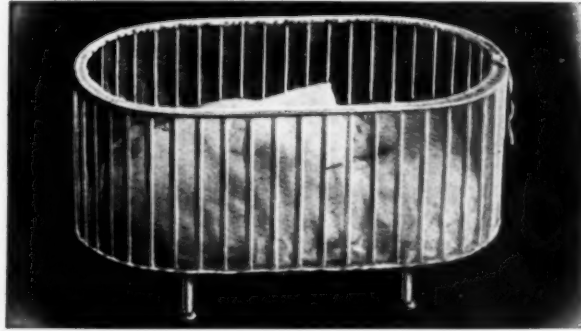
Best Spanish Silk Worm Gut

Quality guaranteed. 6 sizes; 5 lengths. In boxes of 100 strands, or in bundles of 1000.

Price per Thousand

Size	13 in.	14 in.	16 in.
Fine	\$ 6.25	\$ 6.75	\$ 8.75
Medium	6.50	7.00	9.00
Coarse	7.00	7.50	9.50
X-Coarse	8.75	9.25	11.50
XX-Coarse	10.00	11.00	13.50

THE WATTERS LABORATORIES, 55 Fifth Avenue, New York



HESS INFANT INCUBATOR AND BED

A New Device for Use in the Care of Premature and Poorly Nourished Infants

A Valuable Adjunct to the Equipment of the Obstetrical Ward

Upon request we will send to Hospital Superintendents a monograph describing this new method of incubation

SCANLAN-MORRIS COMPANY

Manufacturers of

"THE WHITE LINE" Hospital Furniture and Sterilizing Apparatus
Madison, Wis., U. S. A.

Chicago Office, 1503 Garland Building

Von Duprin

Self Releasing Fire Exit Latches

Have Saved Hundreds of Lives in time of Emergency and Panic

INVESTIGATE what Von Duprin Devices are doing in the Cook County Hospital of Chicago—illustration of which is shown below.

140 Von Duprin Latches are installed in this modern building—all entrance doors and all fire escape doors are safeguarded by a Von Duprin Latch.

The pantry doors leading to hallways are also equipped with Von Duprin Latches, the servers merely having to back up against the latch bar, drawing their wagonettes after them, the door check closing the door automatically. This is a big time saver and warrants careful consideration.

Personal service from 20 Branch Offices is at your command.
Our Catalogue No. 12-L will interest you. May we send a copy?

VONNEGUT HARDWARE COMPANY, Indianapolis, Ind.

Architect PAUL GERHARDT Chicago
General Contractors JOHN GRIFFITHS & SONS CO. Chicago



Bacteriologic Peptone

PARKE, DAVIS & CO.

CHEMICALLY ANALYZED

CONTAINS:

Total Nitrogen	not less than 14.0%
Mineral matter	not more than 3.5%
Moisture	not more than 6.0%

Used in bouillon according to standard methods.

FURNISHES:

Diphtheria Toxin	of which 0.25 mil = 1 L. + Dose
Tetanus Toxin	of which 0.001 mil = 1 M. F. D.

BACTERIOLOGICALLY TESTED

Bacteriologic Peptone, P. D. & Co., is the one American-made peptone which fulfills the varied and exacting requirements of all bacteriologic work.

It has a maximum content of the proper amino acids, or protein "building stones."

It has the proper chemical structure for the production of diphtheria and tetanus toxins of highest potency.

Its efficiency has been established under practical working conditions by many of the best known scientists in North America. This work included, in addition to the routine of the bacteriological laboratory, such special procedures as cultivation of spirochætæ; analysis of milk, water and soil; standardization of disinfectants, manufacture of serums and vaccines, indol production tests, and some of the other more delicate biologic reactions.

Bacteriologic Peptone, P. D. & Co., is readily and completely soluble in all proportions, furnishing clear bouillon and agar.

Supplied in 1-pound bottles and 5- and 10-pound cans.

WRITE FOR LITERATURE AND QUOTATIONS.

Home Offices and Laboratories,
Detroit, Michigan.

Parke, Davis & Co.

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ARMOUR AND COMPANY
CHICAGO

1677

Sizes 000, 00, 0, 1, 2, 3,
4, 5, and 6.

Plain and Chromic.
60-inch Lengths.

Pituitary Liquid,

Physiologically standardized; free from preservatives. 1cc and ½cc, boxes of 6.

Corpus Luteum, from true substance.

Powder, 2- and 5-grain Capsules and 2-grain Tablets.

Extract Red Bone Marrow,

Hematogenetic, Histogenetic.

Elixir of Enzymes,

Digestant and vehicle.

Thyroids, Powder,

¼-, ½-, 1-, and 2-grain Tablets.

Full line of organotherapeutic agents.

Literature to physicians on request.



OUR unequalled facilities for the manufacture of Surgical Catgut Ligatures and Sutures will appeal to the surgeon who gives the subject a moment's consideration. From the slaughter of the sheep to the sterilization of the strands, every process is under the care of an Armour man who is an expert at his work. The result: Smooth, strong, supple, and thoroughly sterile sutures.



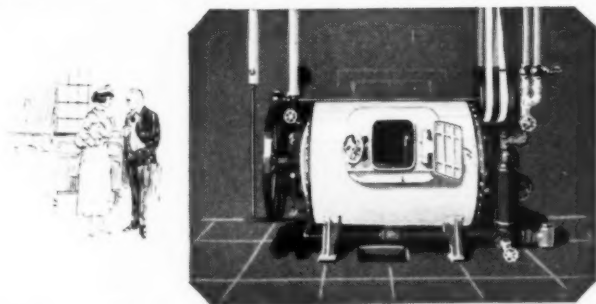
Welch's

Grape Juice

WELCH'S brings to the convalescent a delicious, strengthening tonic—a welcome glimpse into the approaching day of restored health. A cheery word, a smile, sunshine and a glass of cool, nourishing Welch's are wonderfully effective in hastening the day of full recovery.

A little booklet "The Food Value of the Grape" will be sent free to any physician or dietitian on request.

**The Welch Grape Juice Company,
Westfield, N.Y.**



Reclamation of Gauze and Bandages is now a Patriotic Duty.

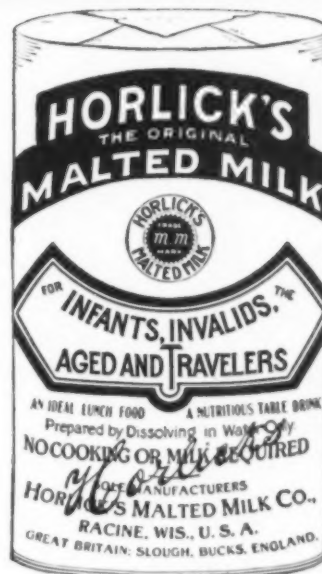
The normal demand for gauze and bandages is about 2,000,000 yards per year. During the past three months the Red Cross has used 35,000,000 yards, and Army Requisitions are for about 150,000,000 yards this year.

This increased consumption has brought about a shortage, which will become more acute as Government and Red Cross demands increase. By effective sterilization of gauze and bandages with an American High Pressure Sterilizing Washer, every hospital can perform a patriotic service and effect a great saving—as much as \$10,000 a year.

Send for a copy of an investigation of this method of sterilization made at the Rockefeller Institute by the Lederle Laboratories.

The American Laundry Machinery Company
NEW YORK CINCINNATI CHICAGO SAN FRANCISCO
Canadian Factory: The Canadian Laundry Machinery Co., Ltd.
Toronto

Ask For and GET



Others are imitations, inferior in quality, flavor, and nutriment.

Samples on request.

Horlick's Malted Milk Company, Racine, Wis.

THE conditions surrounding the production, handling and preparation of Borden's Eagle Brand Condensed Milk assure its purity.

In addition to the tuberculin tests of the state, Borden veterinarians regularly inspect the herds from which comes the milk for Eagle Brand.

Eagle Brand has been specified for years as an infant food. It is easily digested for the curd is soft and flocculent—similar to that of mother's milk. It is always pure—always uniform in quality and composition.

Samples, analysis and literature will be mailed on receipt of professional card.

BORDEN'S CONDENSED MILK CO.
New York



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ARTONE **FLAT FINISH**

has been used on the walls and metal ceilings in the medicinal bathrooms of the Hotel Chamberlin, which are subject to live steam, and is giving perfect satisfaction.

The Hotel Chamberlin is but one of the many well-known hotels where Artone Flat Finish is being successfully used. The list of hospitals using Artone is increasing daily. Artone is a sanitary paint whose hard durable surface permits of no lodgment for germs. It can be washed repeatedly without injuring the finish.

There are sixteen beautiful velvety shades, which are restful and pleasing to the eye. An interesting booklet on Color and Color Blendings, as well as a handsome color chart of Artone Flat Finish, is free for the asking.

The light shades of U. S. N. Deck Paint make a beautiful sanitary coating for ceilings and walls. The darker shades are ideal for porch, kitchen, and other floors, or wherever wear is hardest. U. S. N. Deck Paint can be repeatedly washed without injuring it. You can apply it at night, and by morning it will be dry. Send for a color card.



THE BILLINGS-CHAPIN & CO.
BOSTON CLEVELAND NEW YORK

A Reminder to Send for a Free Trial Tube of Ten Tablets of

CHLORAZENE (Abbott)

Dakin's Powerful Antiseptic



CHLORAZENE
DAKIN'S POWERFUL
ANTISEPTIC KILLS
INFECTION

This nonpoisonous, efficient, and convenient germicide is rapidly replacing such dangerous agents as bichloride of mercury, carbolic acid, and other substances of this class.

For protection insist on the trade-mark "Abbott." This trade-mark insures purity and strength.

Specify also Abbott's Dichloramine-T, Chlorcosane, Halazone, Galactenzyme, and other American-made Medicinal Products.

Literature on Request

The Abbott Laboratories

Home Office and Laboratories, Dept. 60

CHICAGO

New York—Seattle—San Francisco—Los Angeles—Toronto—Bombay



Base and Floor
one continuous
piece.



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Put On Like Plaster—Wears Like Iron

It is a composition material easily applied in plastic form over old or new wood, iron, concrete, or other solid foundation. Laid $\frac{3}{8}$ to $\frac{1}{2}$ inch thick. Does not crack, peel, or come loose from foundation, and is fire proof.

It presents a continuous, fine-grained, smooth, non-slippery surface, practically a seamless tile. No crack, crevice, or joint for the accumulation of grease, dirt, or moisture. Is noiseless and does not fatigue. In both old and new construction it has been proved.

THE BEST HOSPITAL FLOOR

A few Hospital installations: Barrett Hospital, Kankakee, Ill.; Hartford Hospital, Hartford, Conn.; Monroe County Tuberculosis Sanitarium, Rochester, N. Y.; Rochester State Hospital, Rochester, N. Y.; Dental Dispensary, Rochester, N. Y.; La Crosse Hospital, La Crosse, Wis.; World's Dispensary, Buffalo, N. Y.; Oneida County Hospital, Oneida, N. Y.

Your choice of several practical colors. Full information and sample FREE on request.

IMPERIAL FLOOR COMPANY, 964 Cutler Building, Rochester, N. Y.

On the market 11 years



*The Biggest Money
Saving Feature for
HOSPITALS in a
Decade—Install the*

Fli-Bac Screen

and you will have a permanent Fixture at the same cost or less.

ROLLS UP AUTOMATICALLY

Out of the Way and Out of Sight.

Easily and quickly installed. Consists of a spring roller with rust-proof screening attached. Two metal channels at both sides of window guide the screen for raising or lowering and hold the screen tightly from loosening or buckling.

*A Single Lever Operates
Holds Screen at Any Point*

A metal shield over roller on outside of frame protects both roll and screen from rain, dust, and the elements. Fastens outside the window, but does not interfere with the blinds or sash. No wear or tear from constant handling.

All Thoroughly Rust-Proofed. Last from 10 to 15 Years.

Immediate deliveries promised. Booklet on request.

FLI-BAC SCREEN CORPORATION

136 C East Avenue

Rochester, N. Y.

Standardized!

Standardized hospitals—installations—equipment—make for greatest efficiency—ability to readily meet emergency demands as well as everyday requirements.

That is one important feature of the

Bryant Silent Call System

It has been designed and made for service on the standard house-lighting circuit—operating on standard 110-125-volt circuits—fitting standard outlet boxes—using standard switches, receptacles, wall plates, etc. Every unit is interchangeable with other units—and all giving the highest standard of permanent, satisfactory service.

This is only one of the many exclusive features which have led to the adoption of more than 10,000 stations of the Bryant System in over 200 institutions throughout the country. Let our nearest office tell you how this Standardized Calling System will help you be prepared for all emergencies.



Lee Surgical Hospital, San Antonio, Tex., another of the more than 200 institutions "Bryant Equipped."

THE BRYANT ELECTRIC COMPANY

NEW YORK

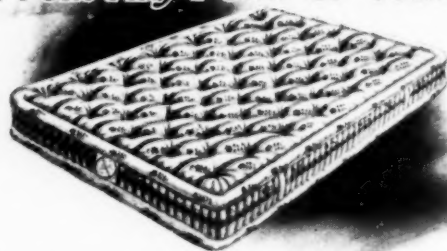
BRIDGEPORT, CONN.

CHICAGO

SAN FRANCISCO

OSTERMOOR

From Any Point of View



Ostermoor Speeds the Cure

Complete relaxation and rest are able allies of medical treatment. Soft, elastic, yielding comfortably to the curves of the body, Ostermoor Mattresses induce perfect rest.

They are built layer by layer, not stuffed like hair, and never need to be made over because the Ostermoor does not get out of shape. Waterproof and sanitary, Ostermoor is the ideal hospital mattress.

An Improved Waterproof Sheeting

Ostermoor Sheeting is soft and flexible, thoroughly waterproofed but entirely free from rubber. It is odorless, practically indestructible, can be cleaned and sterilized by immersion in boiling water. For hospitals, it is the best waterproof sheeting obtainable.

Send for free booklet, "The Test of Time," giving full details of the service we offer hospitals.

Ostermoor & Co., 114 Elizabeth Street, New York
Canadian Agency: Alaska Bedding of Montreal, Ltd., Montreal



Trade Mark
Reg. U. S. Pat. Off.

If You could get a Rubber Sheeting

with a satisfactory past history of four years' extensive hospital service—a sheeting which has been so good as not to cause a single complaint—wouldn't You demand that Rubber Sheeting for Your Institution? Could you afford to be without it?

Here is the opportunity to secure a sheeting with these excellent qualities. Archer Process Sheetings, with this wonderful record behind them, are the sheetings for Your Institution. For four complete years they have been extensively manufactured and distributed without one complaint or adjustment!

Archer Process Sheetings come in three different weights: Royal Archer, very heavy—Vulcan, extra heavy—Trojan, heavy.

Nearly all the good dealers have them in stock, or write us for full particulars and samples.

ARCHER RUBBER CO., Milford, Mass.

DUPLEXALITES

"A Necessary Refinement in Lighting"

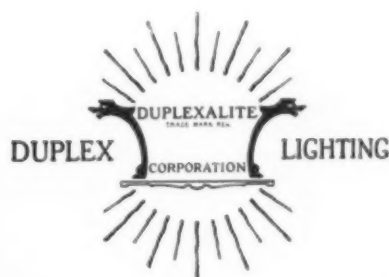
Protected by Patents



No. D-131

Maximum Light with Minimum Glare

Install DUPLEXALITES in hospital wards, private rooms, doctors' offices, reception rooms—anywhere you want light without glare.



The Sanitary Lighting Fixture

DUPLEXALITES are porcelain enameled steel throughout—white, light ivory, pale green, or pearl gray.

No time lost in cleaning DUPLEXALITES—no breakage.

To Hospital Superintendents:

We will submit a sample DUPLEXALITE to you, through your supply house or contractor, on receipt of your request, giving his name and address.

DUPLEXALITE CORPORATION

Equipment for Duplex Lighting

16 East 40th Street

NEW YORK

"AMERICAN"

THE PRODUCT OF SPECIALISTS

AMERICAN

STERILIZERS—DISINFECTORS

QUALITY

SERVICE

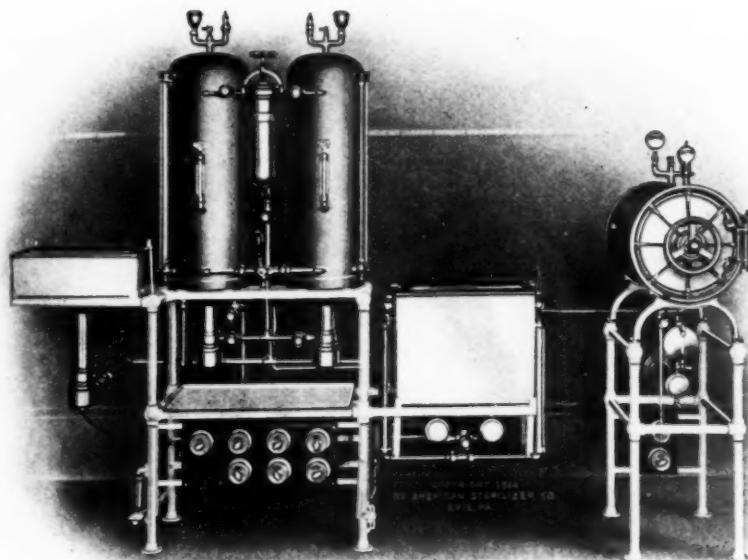
What pleasure and satisfaction are yours when having made a purchase you find that you have something that will do so much more than you had expected!

"AMERICAN" sterilizers are the "EXTRA VALUE" sterilizers with the many pleasant surprises.

The cost is unusually low compared with the unusually high quality.

Write us now about your sterilizer needs.

American Sterilizer Co.
ERIE, PA.



"AMERICAN" ELECTRICALLY HEATED OUTFIT

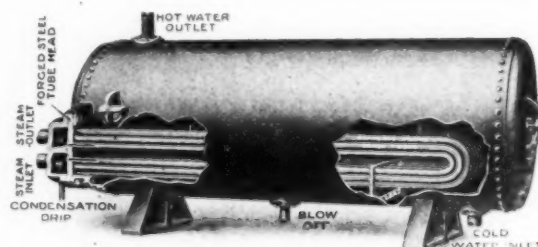
Burns
Telephone Bracket
PRICE \$4.50
28 inch Length

Brings the phone to you sitting or standing. Makes it a real convenience. Three lengths, various mountings, black or nickel finish.

Install a Burns Adjustable Bracket Now
PUT YOUR DESK IN FIGHTING TRIM

American Electric
COMPANY

State and 64th Sts.
Chicago, U.S.A.



Patterson Combined Hot Water Heater and Storage Tank

Built in any desired combination of heating and storage capacities.

Tubes are "N"-shaped seamless drawn brass or copper. This shape prevents all leaks from expansion and contraction strains.

Tubes and tube heads can be easily removed for any purpose.

The experience of over 20 years in heating water for fixtures in hospitals and institutions is at your service without obligation to you Write

The Patterson and Kelley Company
26 Cortlandt Street New York City

CELLUCOTTON

KIMBERLY-CLARK CO.

The Perfect Substitute
for Absorbent Cotton



Roll of "Cellucotton" showing resiliency of the material.

AUTHORITATIVE REPORTS SHOW that the absorbing qualities of Cellucotton are equal to the best cotton.

♦ ♦

CELLUCOTTON WILL ACCOMPLISH MORE than a similar quantity of absorbent cotton. Cellucotton is much lighter and the lateral absorption is greater. It absorbs five times faster, which means better drainage.

♦ ♦

FURTHER THE CONSERVATION OF COTTON by using Cellucotton. Equal or better results are obtained in many cases by Cellucotton. The shortage of Cotton need not cause our Home Hospitals inconvenience when such a serviceable absorbent material as Cellucotton can be had.

Samples and Prices on Request

KIMBERLY-CLARK COMPANY

CHICAGO OFFICE
208 South La Salle St.
CHICAGO, ILL.

MAIN OFFICE
NEENAH, WIS.

NEW YORK OFFICE
51 Chambers Street
NEW YORK CITY

Mills at Neenah, Appleton, Kimberly and Niagara, Wisconsin

If Your Linens

are from the "House of Baker Linens," you can be sure of economical and lasting service.

They are made particularly to withstand the severe test of hospital wear and will return from repeated launderings as good as new.

Proof of their quality is the fact that many of the larger hospitals are equipped throughout with them.

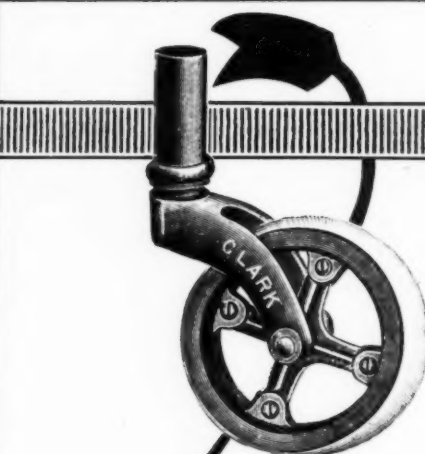
Before ordering new supplies, either to fill in or a complete new outfit, get our samples and prices.

H. W. Baker Linen Co.

41 Worth Street, New York City

752 S. Los Angeles Street
Los Angeles, Cal.

453 Washington Street
Boston, Mass.



The tire on
any rubber
tired caster
will wear out

The beauty of the

CLARK Hospital Caster

is that the tire is held between two iron sections in such a way that it can be easily replaced without the time, expense, and annoyance of sending the caster away.

Runs very easy, due to the steel pin in the swivel and the large wheel. This allows the bed to be moved to any part of the building with ease and without noise or jar.

Furnished with wheels, 3, 4, and 5 inches in diameter, and to fit the inside of bed posts, which measure $\frac{3}{4}$ ", $1\frac{1}{8}$ ", $\frac{7}{8}$ ", 1", $1\frac{1}{8}$ ", or $1\frac{1}{4}$ ". Finished in black japan or aluminum bronze—both are long-wearing and attractive.

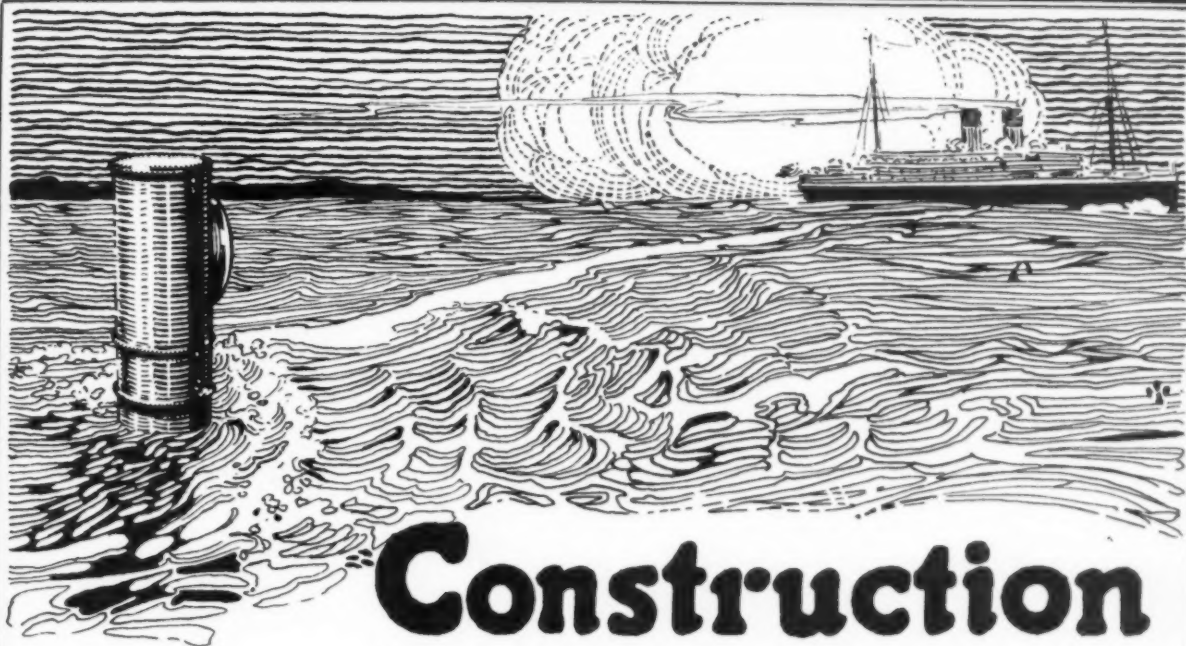
We manufacture a complete line of Hospital Casters, Laundry Trucks, and Baskets.

Send for Bulletin AC13.

The George P. Clark Company

Manufacturers of all kinds of Trucks and Casters

Windsor Locks, Conn.



Construction

Construction that withstands the tremendous pressure of the water is the most essential detail of the modern submarine.

Construction that will withstand the tremendous pressure caused by the steam from boiling water is what allows the Efficiency Hot Water Bottle to give constant, twenty-four hour Hospital Service, 365 days in the year.

The accuracy with which the Efficiency Hot Water Bottle is constructed is best shown by the fact that it is made to contain TWO FULL QUARTS when placed in service, and at the end of its guaranteed year of service, will not hold an ounce more.

The Efficiency Hot Water Bottle has the same degree of flexibility, when filled, as any other rubber hot water bottle—only it will not “balloon” under pressure, nor will it stretch.

The construction of the conning tower of a submarine is no more perfect than the construction of the neck of an Efficiency Hot Water Bottle, which is set in pure gum and steam vulcanized in place.

Efficiency Hot Water Bottles are YOUR means of winning through to “low-service-cost” for YOUR hospital.

Efficiency Hot Water Bottles are made and sold only by

REID BROS.

MANUFACTURERS OF

“Hospital Supplies of Merit”

585 Mission Street
SAN FRANCISCO, CAL.

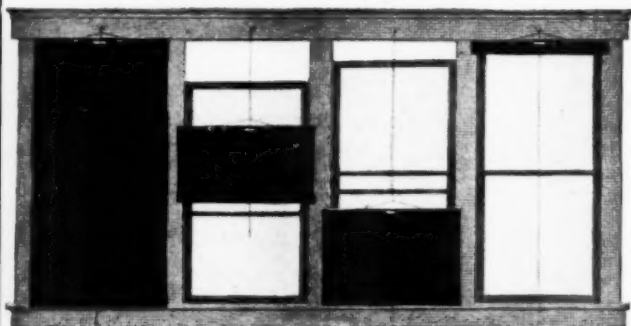
VANCOUVER, B. C.

Third Avenue and Yesler Way
SEATTLE, WASH.

TOKYO, JAPAN



SANITARY — ADJUSTABLE ROLLER WINDOW SHADES



Universal Adjustability

As shown in the illustration above, Draper's Window Shades can be adjusted to cover any part of the window. Adjustments are made easily and simply—so easy and simple that a child can operate them.

Each shade is made of the best materials throughout. Furnished in three colors—white, green, and tan. Sized to meet your requirements.

For regulating light and ventilation, Draper's Window Shades are the best you can buy.

Send for Descriptive Literature

Luther O. Draper Shade Co.
Spiceland, Indiana

A Sanitary Process



The most profitable piece of equipment for every Hospital Laundry is the

HOFFMAN RY STANDARD PRESS

Irons aprons, uniforms, nightgowns, operating gowns, interns' white coats, underwear, socks, handkerchiefs three times as fast as by hand labor and at a mere fraction of the cost.

**IMPOSSIBLE TO BURN OR
SCORCH THE GARMENTS.**

United States Hoffman Machinery Co., Inc.
With which are merged *United States Hoffman Co.* and *T. D. Palmer Co.*
SYRACUSE, N. Y.

Originators of Steam Clothes Pressing Machines

HYCLORITE

CONCENTRATED
SODIUM
HYPOCHLORITE

HYCLORITE

Concentrated Sodium Hypochlorite

The results obtained from the use of Hyclorite in the treatment of infected injury cases are daily demonstrating the efficacy of this antiseptic in the oxidizing of toxins, and in the removal of necrosed tissue through solvent action. In these respects, according to the work reported by Milroy and also Austin and Taylor, hypochlorites are decidedly superior to the chloramin and di-chloramine type of antiseptic.

Hyclorite is always ready for immediate use.

Just add water and apply.

Hyclorite is prepared to a definite hypochlorite strength and alkalinity.

Solutions made from Hyclorite keep much longer than ordinary Dakin's solutions.

There is no waste, testing, or waiting in making a Dakin's solution from Hyclorite.

Price, 32 oz., \$1.25

Discounts to the profession

GENERAL LABORATORIES

4406 South Dickinson Street
MADISON - - - WISCONSIN



Accepted by the Council
on Pharm. and Chem.
for inclusion in N.N.R.



These little interns
should be in *your* Hospital
Let us put them there

High Quality and Low Cost will come to you
with every purchase of

"Ross-Royal" Supplies

Get our prices

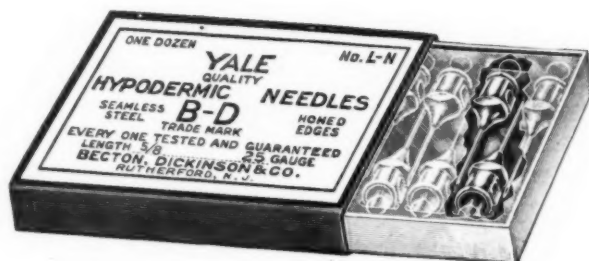
Special quotations this month on Clinical Thermometers

Ross-Royal Company

High Grade Hospital Supplies
1252 Bedford Avenue Brooklyn, N. Y.

B-D
TRADE MARK

The Advantage in Buying Yale Quality Needles



The frequency in which Hypodermic Needles must be used and the urgency in which they are oftentimes needed emphasizes the necessity of always keeping a generous supply of Yale Quality Needles on hand.

The accompanying illustration shows the type of package in which Yale Quality Needles may be obtained in quantities of one dozen to each box.

Each Needle is rigidly secured to a gilt metal card, yet readily accessible and easily removed. With a wrapping of waxed paper and the strong outer-protecting cardboard container, the Needles are constantly guarded against damage to their smooth, keen cutting edges and against dust, moisture, and liability to loss.

A variety of sizes are packed in this manner and the advisability of purchasing Yale Quality Needles is doubly emphasized in the convenience of the package itself.

Becton, Dickinson & Company

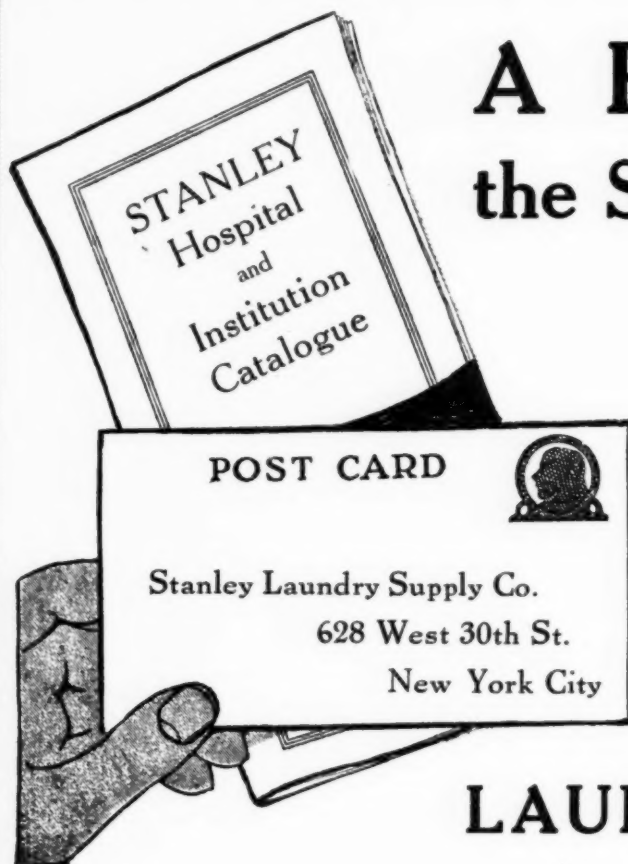
MAKERS OF

Rutherford

B-D Fever Thermometers and Genuine Luer Syringes.

New Jersey

B-D
TRADE MARK



A Postal Brings the Stanley Catalogue

Every Laundry Department needs the Stanley Catalogue—it's brimful of helpful ideas, and lists every needful article used in Laundry work.

STANLEY LAUNDRY SUPPLIES for Hospitals and Institutions

are moderate in price and high in quality—a condition only possible through our ability to purchase raw materials and supplies at low prices, backed by efficient manufacturing and distributing methods.

Every Hospital and Institution Laundry Department can save money and turn out better work by using some of these Stanley Supplies.

PEARL BUTTONS
MARKING INK
MARKING OUTFITS
CURTAIN FRAMES
LAUNDRY BLUE
CLOTHES PINS

SOAP—for Toilet and
Laundry; every kind,
cake or bulk
STARCH
CAUSTIC SODA
LAUNDRY BAGS

BASKETS, TRUCKS and
HAMPERS; of wood,
canvas, rattan, or splint
PEARL BUTTONS
PINS, safety and other-
wise, all sizes.

STANLEY LAUNDRY SUPPLY COMPANY

*Laundry Supplies for Hospitals and Institutions, and
Manufacturers of Soaps, Soap Powders, and Cleansers*

628 West 30th Street

New York City

PURO Sanitary

REGISTERED TRADE MARK

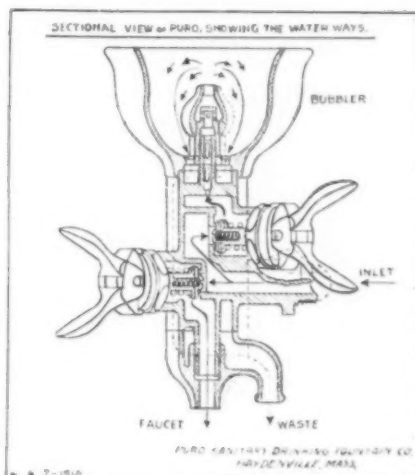
Drinking Fountains For Hospitals



Drinking should be made safe for all—patient, doctor, intern, nurse, and employee, sick and well—around a hospital. "Puro" side bubble drinking fountains are so designed, and make the action of drinking so sanitary, that they are especially suited for hospitals. The bowl surrounding the bubbler positively prevents the lips of patient or nurse from touching the bubbler; the side stream insures that the waste water cannot drop back into the bubbler.

Puro and Puro Jr.—Two Styles

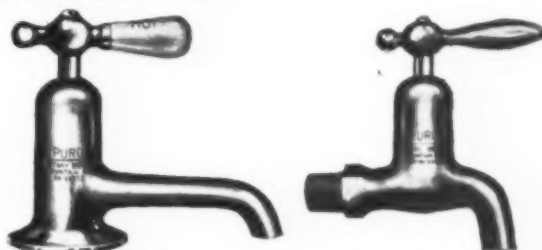
Puro Fountain as illustrated has two handles one for bubbler and one for faucet, and is used for drinking purposes and where pans, water bottles, pitchers, etc., are to be filled in the ward. Note that when the faucet thumb grip is pressed together, the bubbler does not operate. Another fine feature is that waste water does not pass through or come in contact with faucet.



Puro Jr. is small and for drinking purposes only. The water cannot bubble over the top of any Puro fountain and thereby wet the floor. It automatically drains itself.

"Puro" fountains are made of heavy brass *one-piece* casting, heavily nickeled. No parts to get out of order.

They have received gold medal awards at every Exposition of Safety and Sanitation where it has been exhibited. It fulfills all state law requirements.



Sanitary Sink Faucets and Basin Cocks

Unscrew the caps on the faucets in your hospital and see the dirt that comes in contact with the water. The cone-shaped caps on these faucets prevent dirt and germs from collecting around the working parts of the faucet, thereby eliminating any chance of the water becoming contaminated.

Puro Sanitary Drinking Fountain Company
Haydenville, Mass., U. S. A.



Economical Hospital Practice

—in the face of the present and prospective shortage of help—demands labor-saving devices wherever possible.

In conveying soiled linen to the laundry the

PFAUDLER Glass Enameled Steel LAUNDRY CHUTE

saves much rehandling and elevator power. The turn of a valve cleanses it, with hot water, of all adhering infections and foul odors, and keeps its glass-lined interior always sweet and clean.

There are many reasons why this sanitary, economical chute should be in the Hospital *you* are responsible for.

May we tell them to you?

THE PFAUDLER COMPANY ROCHESTER, N. Y.

NEW YORK CHICAGO
110 West 40th St. 1442 Conway Bldg.
SAN FRANCISCO, 512 Sharon Bldg.

FLY SCREENS CIN-MAN-CO REWIREABLE

The illustration to the right shows the manner in which the wire cloth is secured to the all-metal frame. Note that the wire cloth is held by rounded corners, and the absence of all cutting edges.

The illustration below shows the improved detachable spring, easily replaced, and the stationary bronze lift which is out of the way of the window sash. The corners are reinforced by heavy inside angles, making this the most substantial screen on the market.



CINMANCO SCREENS are furnished in all-copper or galvanized steel frames, and filled with genuine bronze or galvanized black enameled wire cloth as desired. We also manufacture the easy-slide, metal-guide, wood-frame screen.

Satisfactory service afforded wherever used

Write for descriptive booklet and prices

**CINCINNATI FLY
SCREEN CO.**
SUMMER AND SOUTH STS.,
CINCINNATI, OHIO

Bubbling Fountains

ICE-COOLED

For attachment to municipal supply



MANY types and sizes. May have coil on bottom as well as on sides. Attractive, convenient and efficient.

This cut shows our No. 604—75 lbs. of ice—cork insulation—15½ coils of ½-inch brass tubing No. 22 gauge. Thorough workmanship—selected materials. Tested and adopted by those whose judgment is unquestioned.

Olive brown baked enamel finish. Pure white vitreous cast iron enameled bowl. Fittings nickel-plated.

Wastes above or below the floor.

Send for list of users.

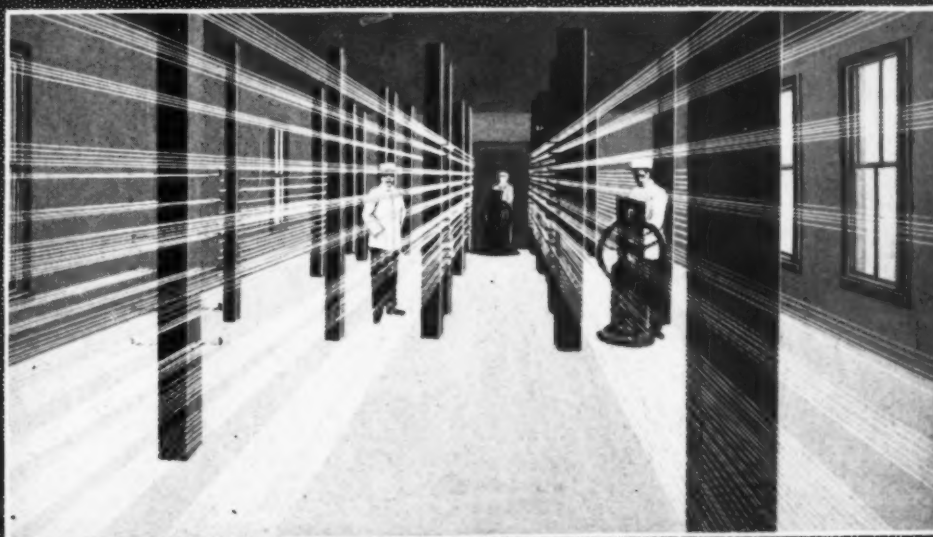
Many thousand in use.

The best is the cheapest.

Manufacturing Equipment and Engineering Co.
Shop and Factory Metal Equipment Outfitters
136 Federal Street, Boston, Mass.

Send for catalogue

WORKS AND MAIL ADDRESS - FRAMINGHAM, MASS



Preparing Perfect Surgical Gut

No. 4—Spinning, Drying, and Finishing

In the preparation of surgical gut, which is composed of a number of individual strips, spun or twisted together, it is necessary to preserve, during the early stages of the process, the property of agglutination to the fullest extent, for owing to this property the strands, after twisting and drying, adhere so closely that the strand, to all appearances, is homogeneous, and has no tendency to untwist in the process of sterilization or in the hands of the surgeon.

Twisting of the strips together to form a surgical strand is accomplished through the use of an apparatus operated by hand, as are practically all of the manipulations in catgut manufacture, and the tension and twist very carefully regulated to insure uniformity.

After spinning, the strand is placed on a drying frame, here illustrated, which is very

massively constructed, as the strain to which it is subjected through contraction of the strands of drying gut is very great.

The room in which this drying out of the material is conducted is heated to a carefully maintained temperature, which serves to hasten the removal of moisture from the gut, which is immediately drawn off by fans, the air in the room being constantly circulated.

Once dried, the catgut is polished by the use of fine sandpaper, which must be very skillfully done in order that the gut may be kept cylindrical in form and the caliber from end to end unvaried. Excessive smoothness is quite generally considered as objectionable as excessive roughness, a medium finish meeting the necessities of the surgeon most perfectly.

Our booklet, "Tubes of Distinction," and samples on request.

HOLLISTER-WILSON LABORATORIES

6620 Kimbark Avenue

Chicago, U. S. A.

"TUBES OF DISTINCTION"



A Quiet-Running Fan for Hospital Use

AN electric fan keeps the air in a room in circulation. Placed near a window it brings in fresh air and forces out the foul air. There is always a lower temperature in a room cooled by an electric fan.

The General Electric Fan shown here has six blades instead of the regulation four blades which other fans have. These extra blades cut more air—create greater circulation—at a slower speed, which makes a smooth, quiet-running fan.

G-E Fans have established a reputation for dependability. They cost only two or three cents a day to operate, and require no attention except a few drops of oil once or twice a season.

THIS six-blade G-E Fan is obtainable in 12-inch or 16-inch size; has three speeds; can be set upon table or bureau or bracketed to wall. Is green enamel except blades, which are finished in lacquered brass.

Look for this—
the mark of leadership
in electrical development
and manufacture.



Buy the fan that outsells all others

G-E Fans

GENERAL ELECTRIC COMPANY



Refrigerators, Cooling Rooms, and Refrigerating Plants for all Hospital requirements

Brecht
COMPANY
ESTABLISHED 1853 ST-LOUIS

Refrigerators you can depend on

Dry, sweet, and easily cleaned. Our 64 years of experience has made our Refrigerators the standard. All sizes built to order.

Send us your specifications for quotation

ADDRESS DEPT. R

THE BRECHT COMPANY

Established 1853

ST. LOUIS, MO.

CHICAGO PARIS BUENOS AIRES NEW YORK
725 Monadnock Bldg 176 Pearl Street



SANITARY OR HOPPER BRUSH. The only perfect brush for cleaning out Hoppers and Toilets. Handle 27 inches long. Also made with curved handle.



URINAL BRUSH. Made of Pure, Stiff Bristle. Will Stand Boiling and Sterilizing. Curved so as to reach all parts of the Urinal. The best brush for cleaning urinals. Handles 14 to 18 inches long.



BED-PAN BRUSH. Made of Pure, Stiff Bristle; will stand Boiling and Sterilizing. The only Brush on the market that will properly clean Bed-Pans. Metal handles, 14 to 18 in. long.

Your inquiry will receive prompt attention. Write today.

A. H. ALTSCHUL

73-77 PARK PLACE

NEW YORK CITY



Liquid

**Insecticide and Germicide
Especially Prepared for
Hospital and Institution Use**

**It Kills Bugs Instantly
and They Stay Dead!**

Vermingo is a Very Strong and Efficient
Germicide for Dry Surfaces.

We especially recommend our
LIQUID ANTISEPTIC SOAP

(Green)

Every one of our products is guaranteed.

Write us for detailed information.

**THE WORRELL MFG. COMPANY
ST. LOUIS, MO.**

Manufacturers of the Vermingo Line of Insecticides and Disinfectants.

HEADQUARTERS FOR HOSPITAL GARMENTS

Doctor's Operating Gowns
Nurses' Gowns
Night Shirts

Pajamas
Bath Robes
Duck Suits, etc.

WE carry a full line in stock for immediate delivery, or can make anything you might suggest made of any kind of material desired.

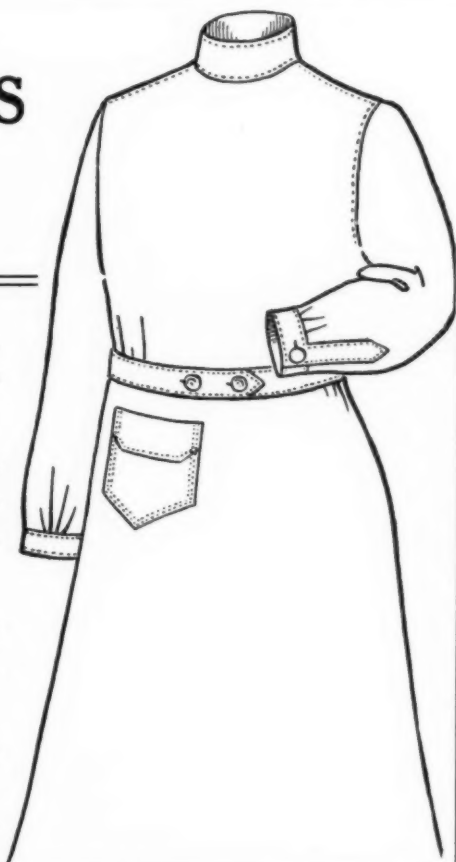
It is universally conceded that we make the most practical hospital garments obtainable—cut, workmanship, and quality of the very best at manufacturer's lowest wholesale prices.

Send us a trial order, if only for a single sample garment, or write for our catalogue on hospital garments, and be convinced.

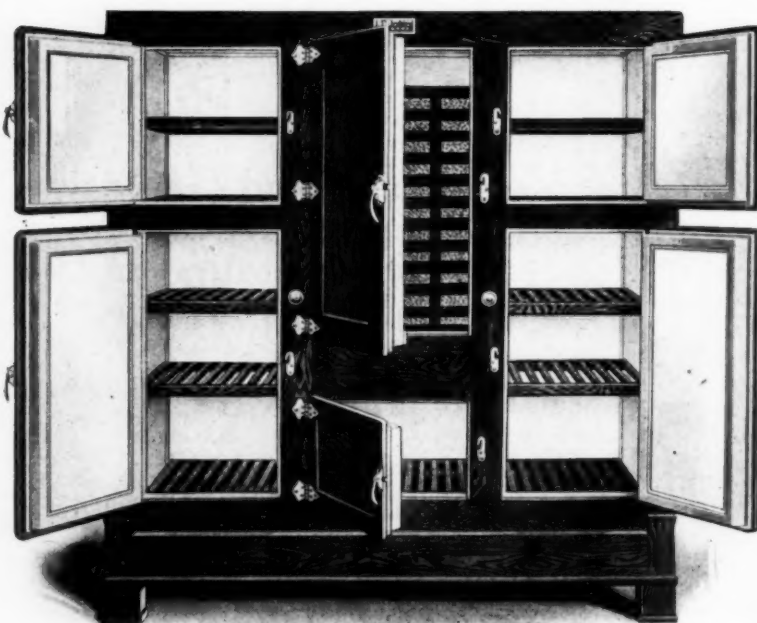
JOHN W. FILLMAN COMPANY

1020-1022-1024 Filbert Street

Philadelphia, Pa.



"B. & B. Ice King" Refrigerators



As Durable, Sanitary,
and Efficient as Re-
frigerators can be made

A great number of styles from which to choose. Or, if you desire it, we make them to order from your or your architect's plans and specifications.

Opalite Glass, or any other desirable lining. Sheet Cork, Granulated Cork, Mineral Wool, Rock Cork, or other proved efficient insulation.

All materials used are the best that money can buy. The cabinet work is equal to that of any high-grade piece of furniture.

Here is a refrigerator that will give you longer service and more efficient service at a smaller first and operating cost. Let us send you our catalog.

Stock styles shipped everywhere, subject to examination and approval.

Ligonier Refrigerator Co., No. 100 Cavin St., **Ligonier, Indiana**



WILSON'S
"RESTGOOD"
 SANITARY CURLED HAIR MATTRESS

WHEN the doctor orders "absolute rest" he knows that his patients will get it if the bed is equipped with a "Restgood." He knows, too, that the "Restgood" is the only mattress that can be thoroughly sterilized. He knows that his patients will not be subjected to the possibility of infection from germ-laden mattresses.

The "Restgood" is the only safe mattress for the hospital, in addition to being the most comfortable mattress made. Unlike mattresses made of cotton and other inferior materials, the "Restgood" can be sterilized to the point of live steam without impairing its good qualities or resilience.

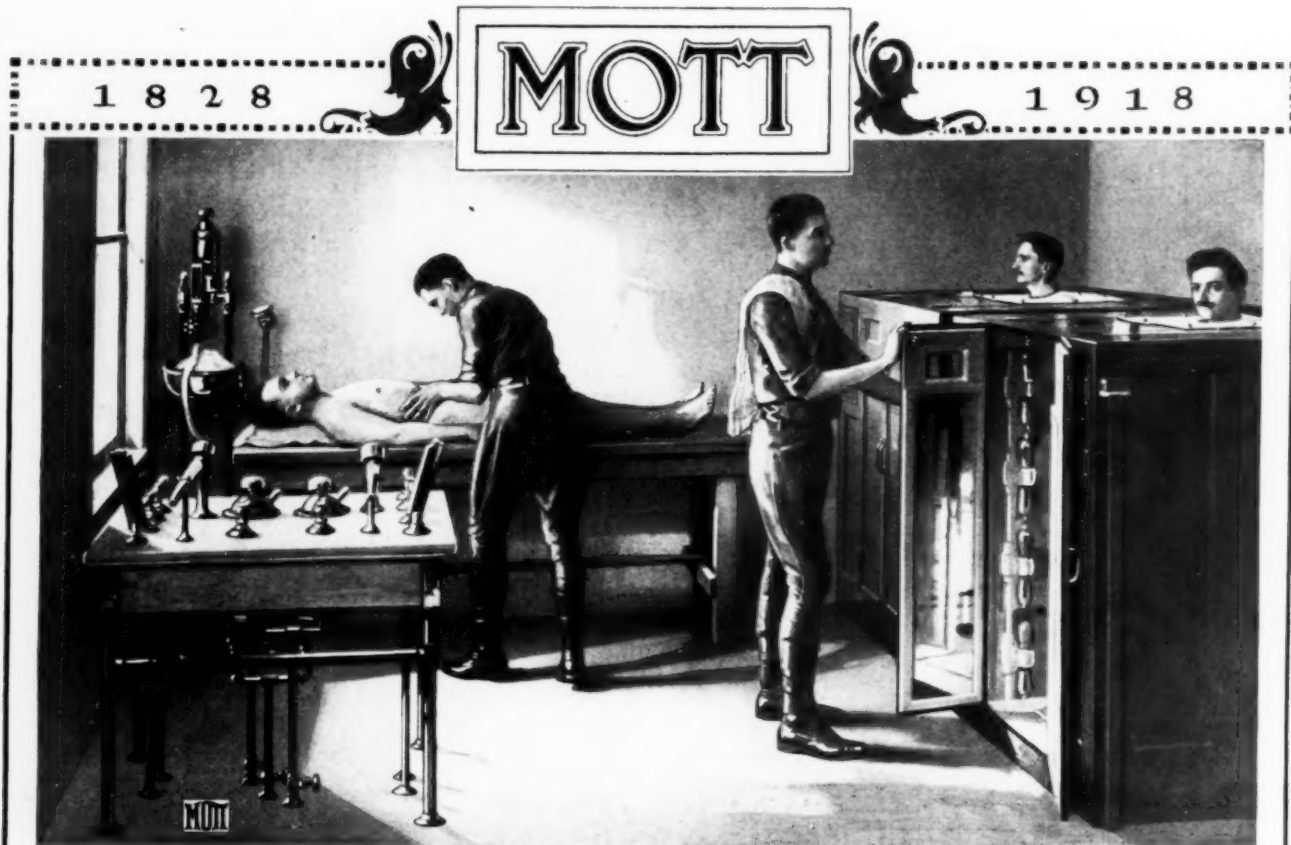
Hospital superintendents should realize that "Restgoods" in their hospitals will prove a most economical investment, for they last indefinitely, and give greater satisfaction and sanitation. We will gladly furnish samples of hair, ticking, and literature. Address Dept. M. H. 7.

"This
 mark



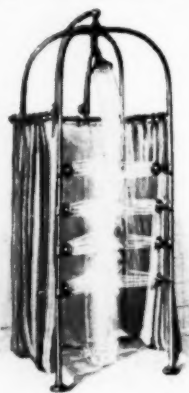
your
 guarantee"





Mott Hydro-Therapeutic Equipment for Base and Reconstruction Hospitals

Designed especially to meet the requirements of the Government for the Army and Navy—here and “over there.”



All mixed water is controlled by the Leonard Thermostatic Mixing Valve, which delivers water with absolute certainty at the temperature desired.

The type of control table shown in the picture may easily be connected or removed. It was designed to fulfill the Government's requirements for administering Hydro-therapy.

The electric light cabinets are shipped complete as shown, but each cabinet is made in two sections, and may readily be taken apart where the width of the doors is limited.

The whole equipment, including the other fixtures which do not show in the illustration, such as the continuous bath, arm and leg baths, etc., are as substantially made as our regular fixtures for the permanent institution.

Write us for complete information. Our experts are at your service.

EVERYTHING WE SELL WE MAKE

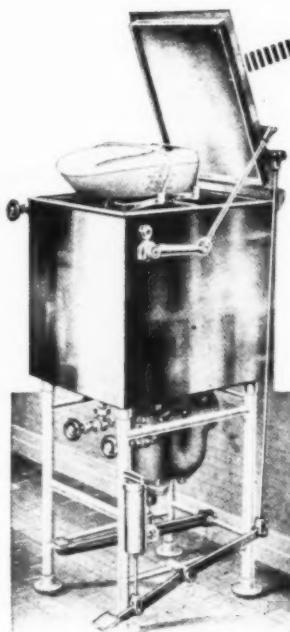
THE J. L. MOTT IRON WORKS

TRENTON, N. J.

NEW YORK, FIFTH AVENUE AND SEVENTEENTH STREET

Boston, Chicago, Philadelphia, Detroit, Washington, St. Louis, Denver, San Francisco, Atlanta, Seattle, Portland (Ore.), Indianapolis, Pittsburgh, Cleveland, Salt Lake City, Houston and Des Moines. Mott Company, Ltd., Montreal, Toronto, and Winnipeg, Canada

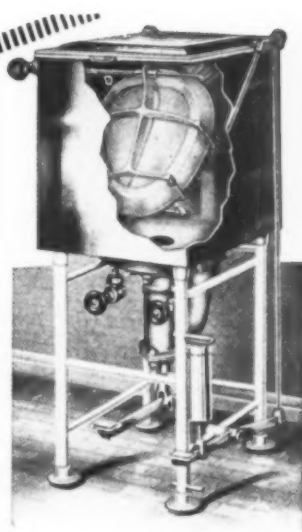
The Castle Bed Pan and Excreta Sterilizer does all the work



IT is not a mere washing machine; it *sterilizes* both bed pan and excreta and disposes of the latter without maintaining a permanently septic condition in the interior of the plumbing.

All that is necessary for the nurse to do is to lay the bed pan in the sterilizer, as in the left-hand illustration, the door being held open by pressure of the foot on the foot lever. Releasing the foot gives the pan the position shown in the right-hand illustration. The bed pan is then, by turning the valves, sprayed, its entire contents sterilized and discharged, and both pan and tank thoroughly rinsed.

**No steam and
no odors can
escape**

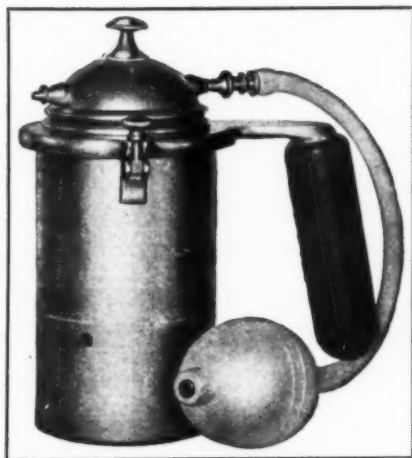


Makers of Sterilizing and
Bacteriological Apparatus

Wilmot Castle Company
800 St. Paul Street ROCHESTER, N. Y.

Write for
interesting circular

For Treating Burns



DeVilbiss THEROMER No. 110

Liquefies and sprays paraffin and wax-like preparations. Has two containers—an inner one for preparation, an outer one for water, forming a water jacket. Easy to operate with hand bulb or any style pump. All metal. Rust proof.

Price, with bulb, \$12.00

Small, single container Theromer, No. 113, price, \$4.00

For sale by Supply Houses, or sent direct, prepaid

The DeVilbiss Mfg. Co. 1306 Dorr Street
TOLEDO - OHIO

Edelvice Enamel

**A finish
equaled only
by genuine porcelain**

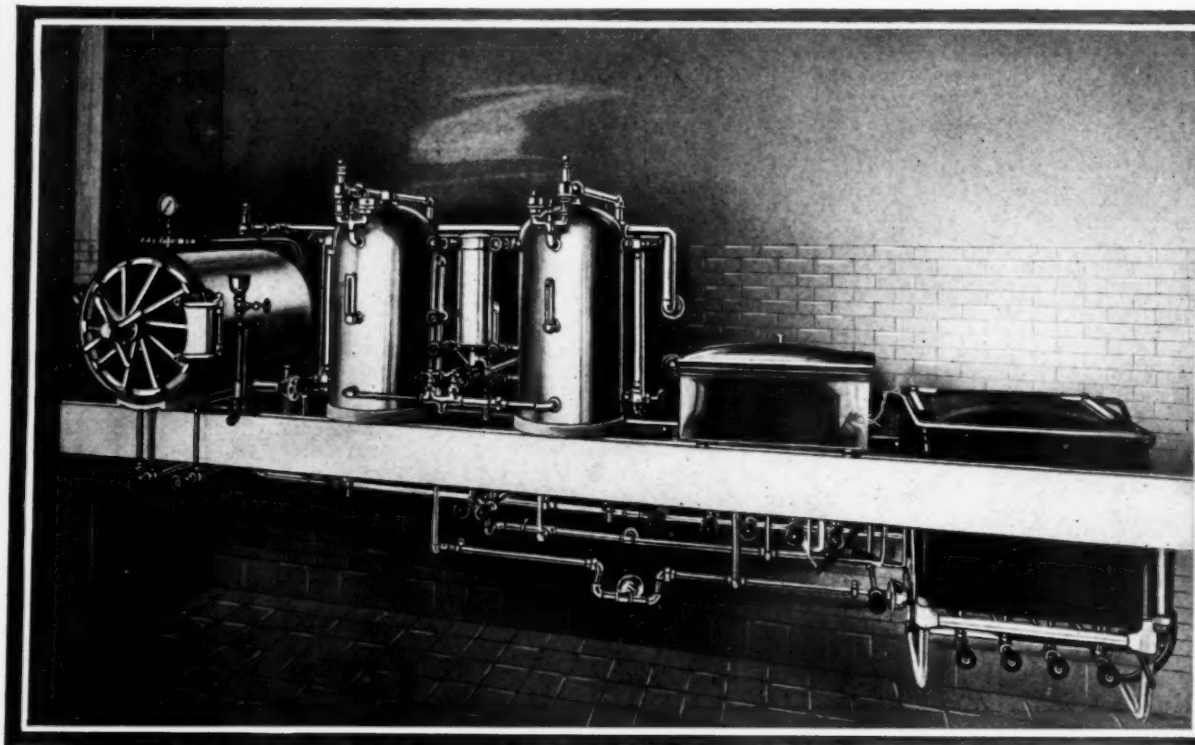
A pure white enamel that withstands wear and washing indefinitely without turning yellow or cracking. Easy to work. Leaves no brush or lap marks.

The ideal enamel for hospital woodwork for white walls or for any metal surface.

Send for full information on Edelvice, and other high quality Keystone finishes suitable to hospital purposes.

**KEYSTONE
VARNISH CO.**

613 Keystone Bldg.
BROOKLYN, N. Y.



The New Bernstein Thought In Sterilizer Installation

Elimination of all Standards, Legs, and Pipe Connections to the Floor—
An Absolutely Clear and Sanitary Floor Surface Assured—A Thorough
Mopping—A Simple and Convenient Matter.

The illustration shows a part of THE BERNSTEIN STERILIZER installation in the new Children's Hospital, Philadelphia, and German Hospital, Brooklyn. It incorporates a new BERNSTEIN THOUGHT in Sterilizer installation which will be of interest to everyone connected with the problems of Hospital equipment. By the use of Heavy Steel Girders spanning the distance between two walls, all supports and connections to the floor, as well as all pipe connections, are eliminated without sacrificing—indeed, increasing—the strength and rigidity of the installation. Knee Levers are provided on Utensil and Instrument Machines, with the consequent elimination of foot pedals and the addition of a convenience in operation.

The Bernstein Line of Pressure Sterilizers is complete. It is being continually improved. It is a Revelation of Sterilizer Efficiency to the increasing number of large users. Bernstein Sterilizer Service will prove an interesting subject of investigation to interested Hospital Executives.

HIGH-GRADE ASEPTIC
HOSPITAL FURNITURE
BEDS AND BEDDING
STERILIZERS

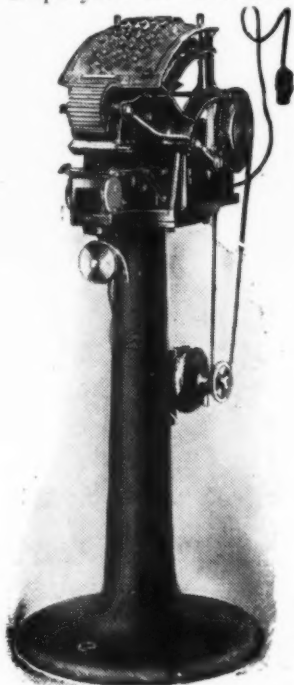
Bernstein
MANUFACTURING COMPANY

THIRD STREET
AND
ALLEGHENY AVENUE
PHILADELPHIA, U. S. A.

Smile

When you see your "Help" leave for the colors—because

if they're from your linen or laundry departments, you can use this wonderful machine to replace them! If they're from some other department, shift your employees to take their places—take nearly all from the linen and laundry departments—for the



Improved No. 8 National Marking Machine

Improved No. 8 National Marking Machines

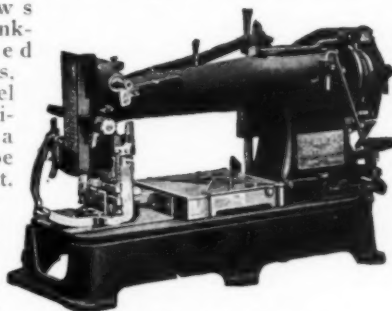
will do the work just as well in every way and you'll save money as well as practice patriotism by releasing human hands for more vital war work.

The "National" places a clean, clear, indelible mark on pieces—works swiftly, surely, gives uniform results, avoids mix-ups, errors, confusion.

Save labor also with

The Rose Label, Tape and Patch Sewing Machine

which sews patches on blankets, quilts, bed and table linens, wearing apparel and other articles on which a mark cannot be placed direct. Three to four times faster than an ordinary sewing machine—therefore a saving of time and money as well as human labor.



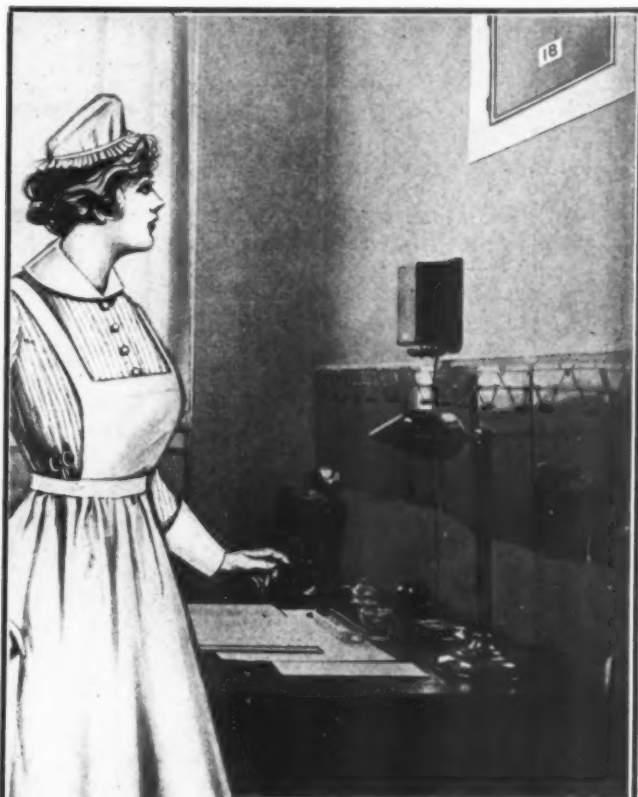
The Rose Label, Tape and Patch Sewing Machine

"Better Marking in the Institution" tells the story of economy—write for copy.

The National Marking Machine Co.

1062 Gilbert Avenue

Cincinnati, Ohio



Ward 18 Calls

And instantly the attentive nurse hastens to answer. Efficient, intelligent service is the result of an efficient, intelligent signal system.

Holtzer-Cabot

Holtzer-Cabot Hospital Signal Systems are installed in the most famous hospitals, sanitariums and private institutions all over the world. The simplicity, safety, flexibility and compactness of these complete systems are illustrated in the new bulletin—Hospital Signal Systems. Send for your copy today.

THE HOLTZER-CABOT ELECTRIC CO.
BOSTON, MASS.
6161-65 80 STATE ST. CHICAGO 101 PARK AVENUE NEW YORK 1104 UNION TRUST BLDG. BALTIMORE

Established 1891

Rhoads & Company

The Pioneer Institution House

By adhering to an unexaggerated description of our goods, and by filling and shipping orders promptly, hospital buyers dealing with us have come to learn that purchases of hospital goods can be made from us as satisfactorily by mail as though they visited our store.

Following is a list showing the articles we carry:

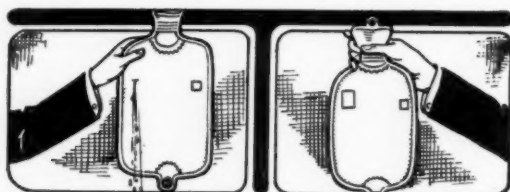
Rubber Sheets	Ducks	Corduroy
Rubber Sheetting	Drills	Scrub Cloth
White Blankets	Canton Flannels	Diaper Cloths
Colored Blankets	Shaker Flannels	Night Gown Twill
Indestructible Blankets	Outing Flannels	Apron Gingham
Dimity Spreads	Bandage Flannels	
Crochet Spreads	Crinoline	
Table Linen	Gauze	
Napkins	Strong Dress Goods	
	Curtain Scrim	
Toweling	Operating Gowns	Uniform Gingham
Scarving	Patients' Gowns	White Uniform Cloths
Huck Towels	Nurses' Gowns	Poplins
Turkish Towels	Children's Gowns	Mattress Pads
Brown Muslin	Pajamas	Suspenders
Bleached Muslin	Bath Robes	Women's Hose
Bandage Muslin	Duck Coats	Men's Hose
Sheets all Sizes	Duck Pants	Children's Hose
Sheeting all Widths	Shawls	Handkerchiefs
Pillow Cases	Hoods	Combs
Tubing	Slippers	
Shirtings	Men's Clothing	
Dress Cheviots	Men's Shirts	
Denim	Cassimeres	
Ticking	Jeans	
	Buttons	
	Thread	
	Shoe Laces	
	Safety Pins	
	Tape	

Let us know from the items enumerated just what articles you are interested in, and we will be glad to send you samples and prices for your further consideration, and, of course, without cost or obligation to you.

RHOADS & COMPANY

1023 Filbert Street

PHILADELPHIA, PA.



Patch—All Your Leaking,
Punctured

HOT WATER BOTTLES

With the Never-Failing, Cleanly

E. Z. SELF CEMENTING PATCH
SELF VULCANIZING

WIDELY used in hospitals everywhere, because so easy and clean to apply—no tedious, sticky messes of glue or cement—just a little touch of gasoline and on goes E. Z. Patch to STAY. During sterilization or boiling it becomes actually vulcanized to the bag; can't peel or tear off. Have some handy—they will save time and money.

PRICES

E. Z. Patches for Hot Water Bottles, home size, four for 25c; hospital size, twenty for \$1.00.

THE E. Z. PATCH CO.

Manufacturers of Patches for Surgical and Household Rubber Goods

AKRON

OHIO



**Born's Cooking and
Serving Appliances**

Our line comprises ranges, broilers, bake ovens, warmers, coffee urns, steam cookers, steam jacket kettles, dish washers and sterilizers, sanitary sinks, sanitary cook tables and work tables, and a variety of gas and steam cooking appliances.

The above cut represents a ward steam table with gas hot plate and toaster. The dish warmer is finished in white porcelain enamel and nickel trimmed.

We plan the kitchen and equip it complete.
Send for catalogue No. 23.

THE BORN STEEL RANGE CO.
CLEVELAND, OHIO

Bed Comfort for Your Patients

We believe that there is one *perfect* mattress for the hospital bed—and that is

The Sealy Sanitary Tuftless Mattress

Its smooth surface—free from the lumpy puffs of a tufted mattress—yields just enough to give equal support to every part of the body. It eases the bed of pain.

Positively guaranteed against packing, spreading or becoming lumpy for a period of twenty years. Even though used for twenty-four hours a day it never needs remaking.

For cleanliness the Sealy has no equal. For there are no leather tabs to catch dirt—no holes through top or bottom tick to permit the entrance of foreign matter. And the filling of pure, new, long-fibre cotton never deteriorates under the sterilizing process.

Our guarantee means just this—that at the end of twenty years' service every Sealy will have the same soft, springy comfort that it possesses today.

The Sealy Pillow costs less and gives better service.

Get prices from your local dealer, or write us direct.

Free to Superintendents

On request we will furnish any hospital superintendent with a Sealy to try out on his own bed for 60 nights. No obligation or expense. Simply write and state size of bed.

Sealy Mattress Company
Sugar Land, Texas



Hooverize in your kitchen.

Labor shortage makes a speeding up of production necessary. Equipment which accomplishes the same work in less time, at smaller cost, is the equipment of



the hour—and the Read three speed mixer was designed as a time-saver, and will increase quantity as well as quality of your products. Will you let us prove our statements?

Illustrated booklet and list of users on request.

Read Machinery Co.
York, Pa.

**Kitchen Machines and Bakery
Outfits**

575 HOSPITALS

and Sanitariums, including some of the best-known institutions in the country, use "NATIONAL" High-Pressure Sterilizers.

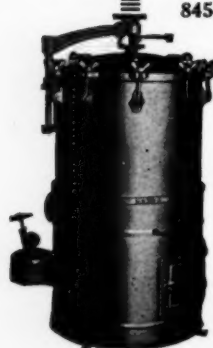
Can you ask better evidence of their reliability?

Large capacity; simplicity of operation; speed; bone-dry dressings; easy to keep clean—what more do you want?

Three sizes—Hospital, Medium, and Doctors—at \$145, \$85, and \$60—complete, equipped with gas or gasoline burner or steam coil, as desired.

Sold by reputable surgical supply dealers everywhere. Complete description on request.

Northwestern Steel and Iron Works
Capital Stock, \$200,000.00
845 Spring Street Eau Claire, Wis.



USE
"NATIONAL"
HIGH PRESSURE
STERILIZERS

BED SPREADS

"RIPPLETTE" Bed-Spreads

with the ripple woven in. They wash like a sheet, and are made in all sizes. *Reversible.*

Bates

Crochet Bed-Spreads

Well known as *Bates "Green Ticket"*.
All sizes and qualities.

Our Sample Book of
"Bliss-Fabyan Fabrics"
for Institution use, sent to
purchasing agents on request
BLISS, FABYAN & CO.
Boston - New York - Chicago

TROPICAL

Every Tropical product is of the highest quality which the best brains and workmanship in paint manufacturing are able to produce. The Tropical institution is justly proud of its reputation as a producer of perfect paints on a large scale. Year after year, under a wonderful system of scientific management, the Tropical employees maintain the high Tropical standards. The confidence which the name Tropical inspires in paint users the country over will never be misplaced.

TOCOTONE

Tropical manufactures an unusually durable and decorative paint for hospital interiors, as well as houses, hotels, office buildings, apartments, theaters, schools, etc. It is called Tocotone and is especially desirable from a sanitary standpoint. Tocotone provides a splendid surface for a finishing coat of enamel. It is supplied in 20 beautiful tints and in white. You will find that it takes fewer gallons to effectively finish your walls with Tocotone. Clean water and lye-free soap cleanse it perfectly.

Write for descriptive literature, prices, and other details.

We shall be glad to send you additional facts about Tocotone.

Tropical also makes many other paints—each the leader of its kind. Our exterior paints cover everything from roofs to steel bridges.

Full information about the entire Tropical line will be sent you promptly if you are interested.

Alpine Enamel Snow White

This beautiful snow-white opaque enamel of great brilliancy and durability is another Tropical product; it is equal in quality to the best imported enamel; recommended especially for woodwork and walls in operating rooms.

Tropical Paint and Oil Company
Cleveland, Ohio

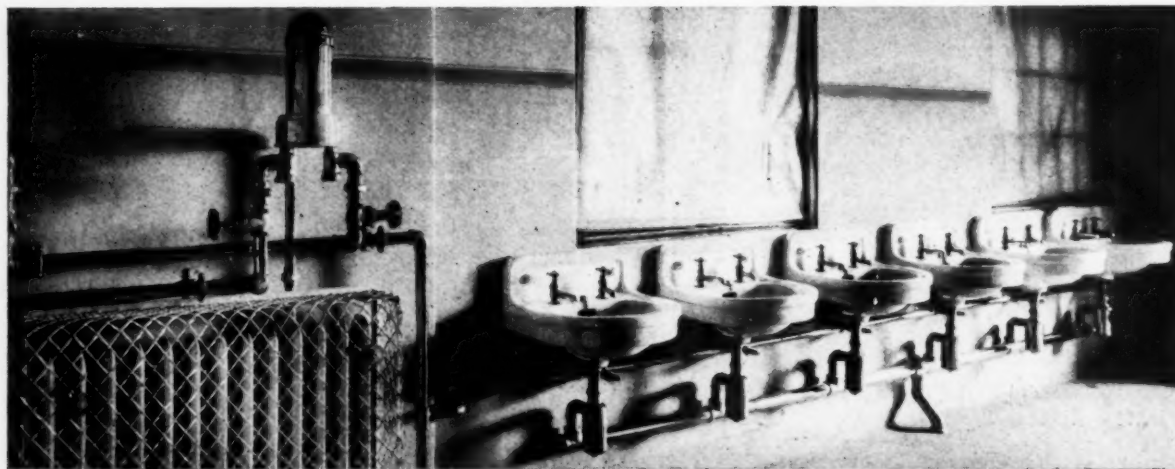


Tropical Paint and Oil Company, Cleveland, Ohio.
Gentlemen:
Send us complete details, prices, etc., on Tocotone and Alpine White. Surface to be covered with Tocotone approximately.....sq. ft. with Alpine White.....sq. ft.
Firm.....
City.....
Inquirer.....



Leonard

Valves for Permanent Safety



Leonard Valve Controlling Water Temperature of Group of Wash Basins

The volume and temperature of the water to be used through the Leonard Valve is set and locked. The Valve may be located in the basement, with pipe line running to wash basins on different floors, or, as in the illustration, Valve may be placed directly in the lavatory and the temperature lever locked, thus controlling the water supply for the one room only. In either case a constant flow and temperature of water is maintained which cannot be changed by anyone but the attendant. This permits attendant's absence from the patient or room with complete freedom from the menace of scalding water accidents, a very desirable safety feature in asylum, home, and institutional service.

The saving of hot water and a resulting coal economy through use of the Leonard Valve is of an almost equal importance to its absolute safety feature. Literature explaining construction and uses will be gladly sent on request.

The Leonard-Rooke Company

PROVIDENCE, R. I.

New York Office, 50 Union Square



**"The Attendant Can
Safely Leave the Patient"**



Mulford Biological Products

**Antitoxins, Vaccines, Serobacterins
and Bacterins**

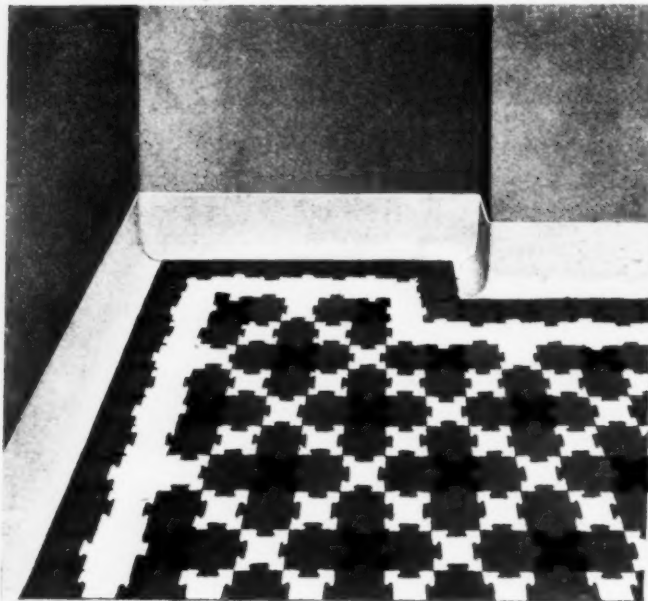
For the Prevention and Treatment of Disease
in War and Peace

**On Land and Sea At Home and Abroad
Used Wherever the Allied Flags Wave**

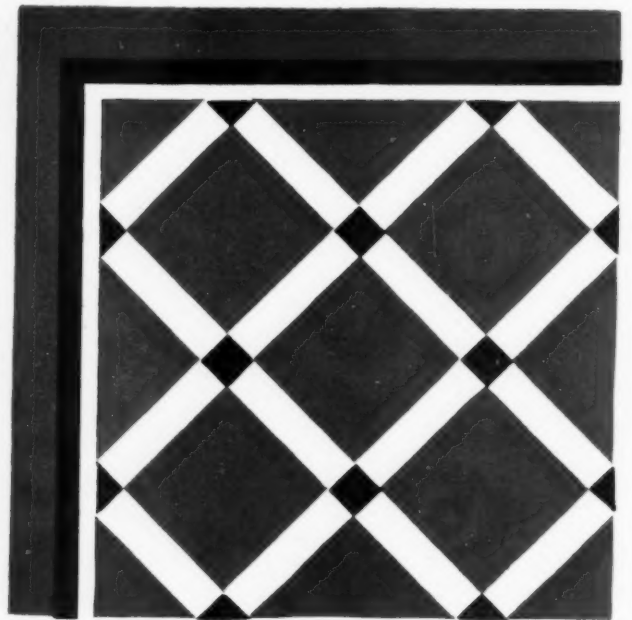
LITERATURE ON REQUEST

H. K. MULFORD CO., Philadelphia, U. S. A.

Manufacturing and Biological Chemists



Interlocking Tile and Cove Base



Square Tile

EVERLASTIC TILE AND SANITARY COVE BASE

The Modern Floor for the Modern Hospital

A Cork Composition

A soft, quiet floor is essential. It must be durable, sanitary, impervious to liquids, and capable of artistic color treatment. Comfort, utility, and appearance! What material combines all?

Everlastic Tile

Composed chiefly of Cork—hence soft, quiet, warm, non-slippery; it is non-absorbent and the joints are hermetically sealed—hence sanitary; it is so durable that it has been adopted as a standard floor for elevator cars by the Otis Elevator Company. In color and texture it is as attractive as the finest ceramics and mosaics, but not so harsh and “institutional” in appearance. It is inexpensive. It is easy to clean.

Made of cork, compounded in all colors. Interlocking, square and oblong. Laid on any backing—concrete, wood, or metal. The fact that Everlastic Tile can be laid on a wood floor is of particular interest to those hospitals which have existing wood floors and desire something better.

DAVID E. KENNEDY, Inc., 55 Fifth Avenue, New York City

Branches throughout United States and Canada



AN ambulance for the Hospital is a necessary part of the Service and should be strictly in keeping and represent the general character and substantiality of the institution. ¶ You must provide for the patients comfort at every step to establish thorough confidence. An ambulance that favorably impresses the patron and then proves its efficiency should certainly merit your full investigation and confidence.

ROCK FALLS MANUFACTURING CO.

BUILDERS OF QUALITY VEHICLES

STERLING, ILL.



Help at the right time!

For your new building project you want all the information you can get on every kind of equipment to be used, when you are planning—not after you have planned.

You need and should have specific information as to measurements, sizes, weights, types, and prices. And it should be complete, accurate, authentic information.

In a single volume Sedgwick gives you all the dumb waiter data you need—in a volume handy to file, handy to handle, profusely illustrated, compactly compiled, clearly expressed.

It is a book that represents twenty-five years of experience in the design, manufacture, and installation of hand power dumb waiters.

It describes all standard types, giving sizes, space requirements, details of construction, and prices. Together with our Service Sheet, it forms the most complete and authentic presentation of the dumb waiter subject ever made available for the hospital's use.

You should have this new, up-to-the-minute catalogue without delay. We will send it to you on request.

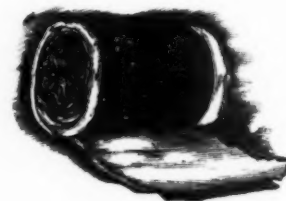
One other thing. If, when you have this book, you find occasion to figure on a special outfit not pictured or described, send your plans to us. In our store of blue prints we can usually locate an outfit and an installation which, with some minor changes, covers just the type you are seeking.

And this Special Service applies to any hospital, at any time, with no obligation attached.

Sedgwick Machine Works

149 West 15th Street, NEW YORK

Hand Power Elevators and Dumb Waiters Exclusively



EXCELSIOR ABSORBENT COTTON MADE BY THE MAPLEWOOD MILLS

Is used for the most delicate operations. We make several other grades—suitable for all purposes.

Write for samples and prices

1293 STAFFORD ROAD
FALL RIVER, MASS.

Outside Information

If you have come to think of Dutch Boy White-Lead as the most satisfactory paint for interior wall decoration, you have solved one-half of your paint problem.

But don't stop there—

In the interest of economy, be reminded that

DUTCH BOY WHITE-LEAD

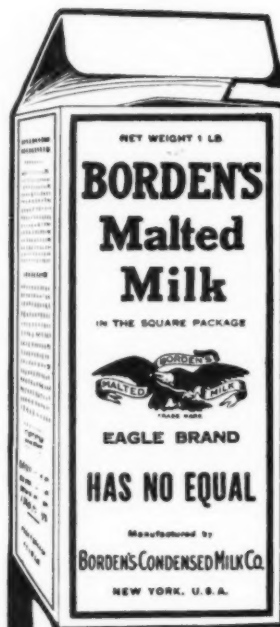
is equally satisfactory for exterior painting. A great many hospitals and thousands of the finest homes have never been painted with any other material.

NATIONAL LEAD COMPANY

New York Buffalo Cincinnati St. Louis
Boston Chicago Cleveland San Francisco

(John T. Lewis & Bros. Co., Philadelphia)
(National Lead & Oil Co., Pittsburgh)





In nine cases out of ten—the ideal food for the sick or convalescing

BORDEN'S Malted Milk

is a welcome addition to the diet of the sick and the menu for the well. It is free from any trace of a sickish, sweet taste, and is of a flavor for which the sick or convalescent person actually craves.

It is nourishing to a high degree, being higher in food value than beef,

mutton or eggs. BORDEN'S, for the reason that the casein or cheesy, indigestible part of the milk is partially predigested, is rapidly and completely assimilated by the most delicate or weakened stomach.

BORDEN'S is readily soluble and is quickly and easily prepared either in the form of cold or hot beverages. It is widely used as a flavoring in such dishes as ice cream, jelly, etc.

Borden's is known the country over by the Square Package in which it is sold. Your local druggist or wholesale house carries Borden's. If they don't, send us their name and address, and we will encourage their doing so.

Send for one of our free Sample Trial Packages. Write
Borden's Condensed Milk Sales Company
 Malted Milk Department New York City





Chicago Lying-In Hospital. Messrs. R. E. Schmidt, Garden and Martin, Architects

Colored Tiles Reduce Eye Strain

Why Tiles?

Some of the Reasons

Tile is:
 Durable
 Non-absorbent
 Inorganic
 Fireproof
 Permanent
 Clean
 Attractive
 Decorative
 Standard
 Economic

*Cheapest in the End—
 Best All the Time*

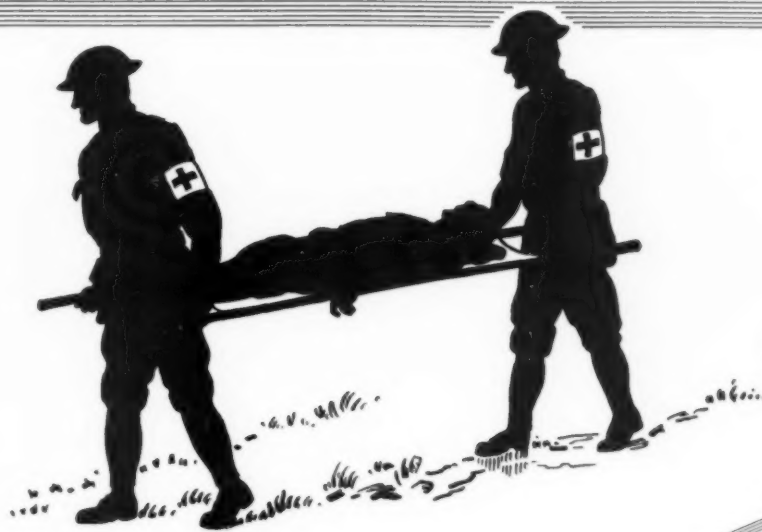
MORE attention is being given each year to the need of eye relief and general attractiveness in hospital wall surfaces.

Being a supplementary requirement at best, it naturally cannot be fulfilled until all other requirements—sanitation, durability, non-absorptiveness, permanence, maintenance, and cost—have been satisfactorily disposed of.

Because tiles, in both white and colors, have all of these qualities, and in addition permit a wall treatment that is restful to the eye, they represent the ideal wall surfacing material for hospitals.

The practical adaptation of colored tiles to hospital walls is interestingly treated in our Hospital Book, sent free to officials upon request.

The Associated Tile Manufacturers
 Beaver Falls, Pa.



*Sutures
fit
for
Surgery*



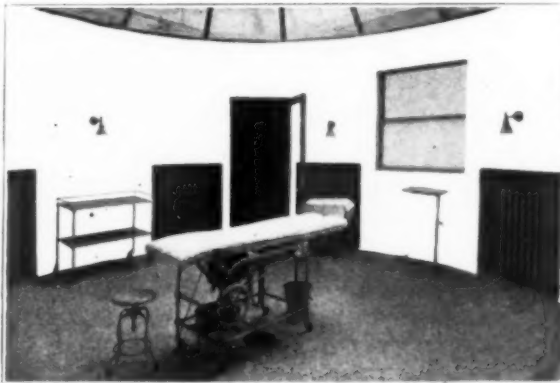
DAVIS & GECK, INC.
Surgical Ligatures

217-221 Duffield Street, BROOKLYN, N.Y., U.S.A.

Branches in San Francisco, Seattle, London. Agencies in Principal Cities.

REG. U.S. PAT. OFF.
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Jefferson Hospital, Roanoke, Va.

VITROLITE

Toilet Partitions and Wainscoting

are immediately
suggestive of whole-
some cleanliness

Whether for new institutions or in reconstructing present buildings, VITROLITE toilet partitions and wainscoting immediately suggest wholesome cleanliness and sanitation. VITROLITE means permanence with the minimum of cleaning expense.

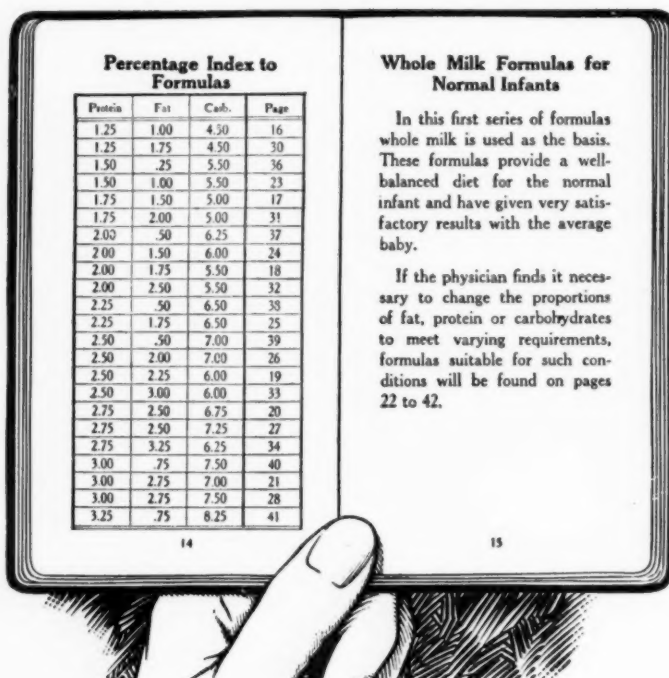
VITROLITE is widely used in operating suites and is recognized by hospital superintendents and authorities because of its aseptic character and the fact of its general adaptability. The surface of VITROLITE is smooth, hard, impermeable to stains, and acid-resisting.

Send for a copy of the book of facts regarding VITROLITE.

The Vitrolite Company
Chamber of Commerce Building

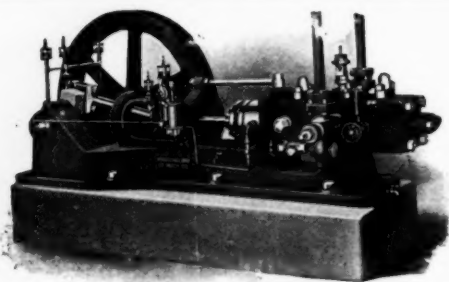
CHICAGO

The Management of an Infant's Diet



This book, a copy of which will be sent to physicians upon request, outlines a method of milk modification that appeals to the doctor who prefers simple mixtures and to the physician who desires to know every detail of percentages and Calories.

Mellin's Food Company
Boston, Mass.



**The Kroeschell
Carbonic
Anhydride
System**
of refrigeration

CO₂

Meets Every Hospital Requirement

- efficient refrigeration for the keeping of meats, vegetables, and foods,
- the manufacture of ice for cooling purposes,
- the cooling of the drinking water system,
- the preserving of serums and specimens,
- and the cooling of rooms to a comfortable temperature regardless of outdoor conditions.

The Kroeschell System requires less space, is simpler in operation, more practical and durable in design and construction than any other system on the market.

Carbon Dioxide, the gas used in this system, is safe, odorless, and neutral toward all foods and materials. Far less expensive than ice and is sanitary.

**KROESCHELL BROTHERS ICE
MACHINE COMPANY**

450 West Erie Street
CHICAGO

30 Church Street
NEW YORK

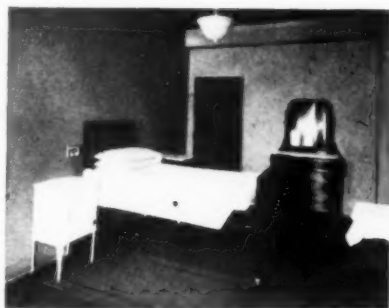


SIMMONS INSTITUTION BEDS

are used throughout

The W. A. Foote Memorial Hospital
Jackson City, Michigan

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One of the Private Rooms, showing one of the several styles of **SIMMONS BEDS** used.

A hospital is no more modern than the modernity of every piece of equipment used. **SIMMONS BEDS** comprise all that is modern in beds for the sick or convalescent. That is why these beds are invariably used in the most up-to-date hospitals of today. That is why you should see the **SIMMONS LINE** before placing your order for beds. Write



Boston
New York
Buffalo
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Philadelphia
Baltimore

SIMMONS COMPANY

The World's Largest Makers of Metal Beds and Springs
Factories: Kenosha, Wisconsin San Francisco, Cal.

Branch Warehouses at

Richmond, Va.
High Point, N. C.
Atlanta
Pittsburgh
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Detroit
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Chicago
Milwaukee
St. Paul-Minneapolis
St. Louis
Denver

Butte
El Paso, Tex.
Seattle
Portland, Ore.
San Francisco
Los Angeles





This will cost you only 40 cents per hour, including electricity and upkeep.

And have you supposed that your only course with these floors was the unsanitary one of applying more coats or else hiring a high-priced floor finisher to put the floors into proper condition?

What you need is the "Utility."

Any ordinary laborer can take this machine and quickly clean off the old finish. Then, by changing the attachment, speedily sandpaper the floor into perfect shape for the new finish.

WHICH DO YOU PREFER

Have you any floors covered with so many coats of varnish, shellac, or paint that you really don't know what the wood underneath looks like?



These four men cost you about \$3.65 per hour, and do the work not half so well.

Many institutions have had beautiful wood floors, but never knew it until the old varnish, shellac, or paint was removed.

Let us send you this Gold Medal Machine under our *Satisfaction or Money Back Guarantee*.

Write for explanatory, interesting literature.

Write Today.

THE KENT VACUUM CLEANER CO., Inc., 523-543 Domanick St., Rome, N. Y.

Also manufacturers of Kent Stationary Kleaner and the Vacuna Portable Cleaner

American-Made "Salvarsan" (Arsphenamine) (Dioxydiaminoarsenobenzene Dihydrochloride) (Ehrlich's "606")

THE Federal Trade Commission has granted license for "Arsphenamine." Under this license we are producing the product identical in every way with the *Salvarsan* which we formerly imported and which conforms in every detail to the standards set by the late Professor Dr. Paul Ehrlich, and is made according to the processes used at the Hoechst works.

In addition to the tests prescribed and made by the Hygienic Laboratory of the Public Health Service, our product is tested by the head of the Department of Biological Chemistry in one of our leading university medical schools, who bears the same judicial attitude to our preparations that Prof. Ehrlich did to the standard German preparations. He subjects them to biological tests, in addition to those prescribed by the Public Health Service, which are more rigorous and comprehensive than those adopted for this purpose by Professor Ehrlich himself. These tests are made and reported upon before the product is submitted to the United States Public Health Service, thus insuring a double and absolute check on every lot turned out.

Our product is being marketed under the name "*Salvarsan*." As the product of other makers is being sold as "Arsphenamine" also, to insure receiving our product order either

SALVARSAN
OR
ARSPHENAMINE—"METZ"

FARBWERKE-HOECHST COMPANY, H. A. METZ, President

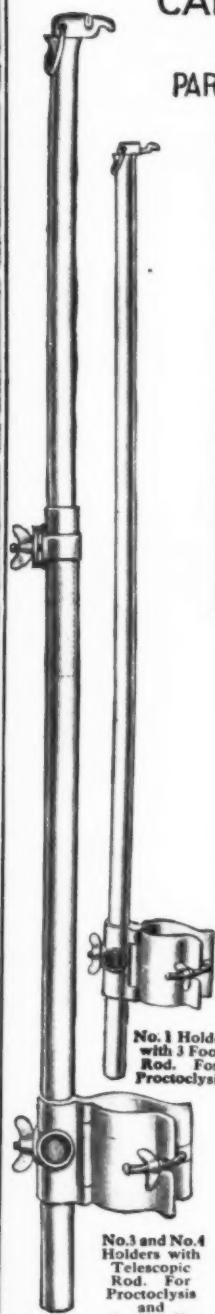
122 Hudson Street, NEW YORK

TWO OF OUR NEWER ADVANCED SPECIALTIES FOR HOSPITALS

"PERFECTION" ADJUSTABLE IRRIGATOR HOLDER

CAN BE ATTACHED TO THE SIDE POST OR TOP RAIL
OF ALMOST ANY HOSPITAL BED

PARTICULARLY ADAPTED FOR ADMINISTERING THE CARREL-DAKIN SOLUTION
AND FOR
PROCTOCYCLYSIS
ALSO FOR
GENERAL USE



Pat. Sept. 26, 1916

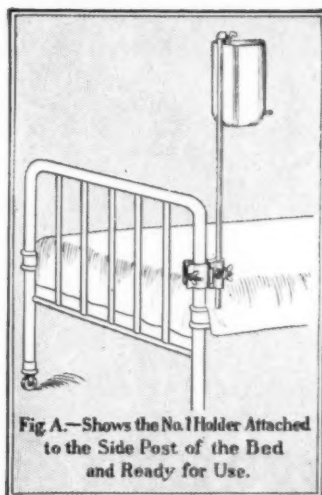


Fig. A.—Shows the No. 1 Holder Attached to the Side Post of the Bed and Ready for Use.

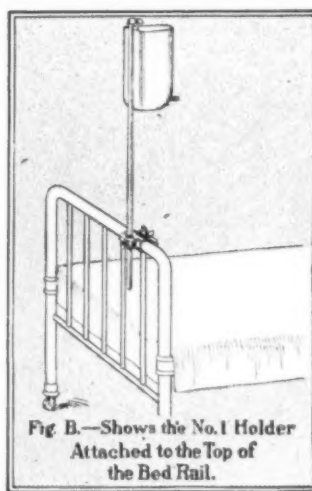


Fig. B.—Shows the No. 1 Holder Attached to the Top of the Bed Rail.

SALINE SOLUTION HEATER

A Simple and Efficient Apparatus for
Keeping the Solution Warm When
Administering
The Murphy Drip

SOLD SEPARATELY, OR WITH
COMPLETE OUTFIT ILLUSTRATED
ON THE RIGHT



Patented Nov. 23, 1915

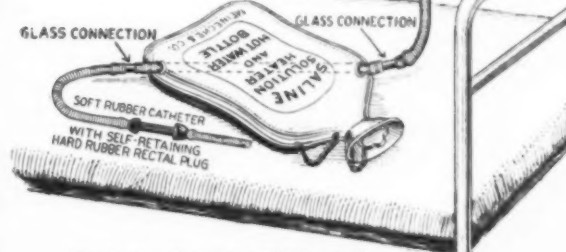
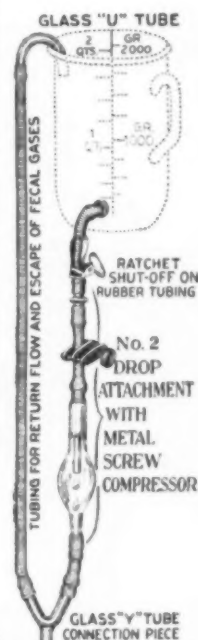


Illustration Shows the "Meinecke"
Saline Solution Heater being used in conjunction
with our No. 20 Outfit.



No. 1 Holder
with 3 Foot
Rod. For
Proctoclysis

No. 3 and No. 4
Holders with
Telescopic
Rod. For
Proctoclysis
and
General Use

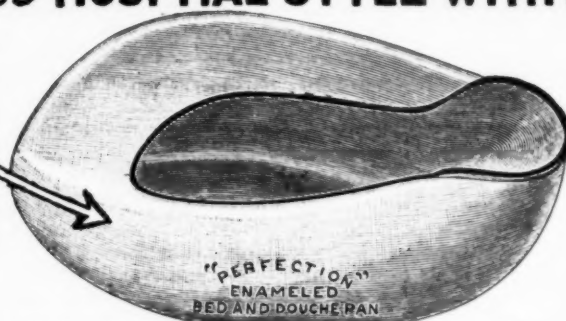
Write for Descriptive Circulars.
ALSO FULLY DESCRIBED IN OUR 1918 CATALOGUE, PAGES 88 TO 93.

MEINECKE & CO., NEW YORK

TWO STANDARD HOSPITAL UTENSILS *Both Seamless*

"PERFECTION" BED AND DOUCHE PAN NEW SEAMLESS HOSPITAL STYLE WITH HIGH BACK-END

NO CORNERS
OR SEAMS WHERE
FECAL MATTER CAN
COLLECT. ALL
HOSPITAL UTENSILS
COMMENCE TO
CHIP AND RUST
AT THE SEAMS.
THIS IS THE ONLY
REALLY SEAMLESS
PAN ON THE MARKET



HIGH BACK-END
OR POUR-OUT
PREVENTS SOILING
OF BED LINEN,
OR SPILLING OVER
WHEN CARRYING.
THIS FEATURE IS
ALSO VALUABLE
IN ENEMA WORK

Patent numbers 651,310 and 920,463. Also Patented in Great Britain
Trade-Mark "Perfection" Reg. U. S. Pat. Office

Made in Standard Size in White Enameled Steel Ware and Designated No. 40
Made in Standard Size in Gray Enameled Steel Ware and Designated No. 30
Also Made in the Hospital Style with High Back End in Porcelain
in both the Regular and Child's Sizes

THIS BED PAN IS ALSO MADE WITH SEAM AND WITH LOW BACK-END, AT A LITTLE LOWER PRICE, IN WHITE ENAMELED STEEL WARE (No. 4) AND GRAY ENAMELED STEEL WARE (No. 3). THESE PANS ARE INTENDED FOR HOME USE. FOR HOSPITAL USE WE RECOMMEND THE SEAMLESS BED PANS, SHOWN ABOVE, AS IN ADDITION TO BEING MORE SANITARY THEY ARE MORE ECONOMICAL, AS THE SEAMED PANS COMMENCE TO RUST AND CHIP AT THE SEAMS.

IF YOU WANT THE PAN WHICH IS ANATOMICALLY CORRECT, AND WHICH IS ACTUALLY SEAMLESS, ALWAYS SPECIFY THE SEAMLESS WHITE No. 40, OR THE SEAMLESS GRAY No. 30. LOOK FOR THE NAME "PERFECTION" STAMPED ON EACH PAN

"PERFECTION" MALE URINAL MUCH SUPERIOR TO THE OLD STYLE DUCK SHAPE

THE ONLY SEAMLESS
ENAMELED URINAL

HOLDS A FULL QUART
IN ACTUAL USE.
ALMOST DOUBLE
THE CAPACITY OF
ORDINARY URINALS

PREVENTS WETTING
OF BED LINEN.
EASIER TO HANDLE



ALSO MADE IN PORCELAIN,
PLAIN GLASS AND GLASS GRADUATED

STANDS FIRMLY
ON END WHEN
NOT IN USE SO
THAT CONTENTS
WILL NOT SPILL

CAN BE USED IN
CONJUNCTION WITH THE
PERFECTION BED PAN

Patented Jan. 24 and Nov. 21, 1903.

Write for Fuller Particulars and Prices of these Two Utensils

MEINECKE & CO., NEW YORK

BUTLER BACK REST

Patented
SANITARY
CONVENIENT
LIGHT and STRONG

Adjustable to four angles.

Sanitary in every respect. Supports the heaviest patient. Easily manipulated by one person. Placed under or over the mattress.

Back made of heavy canvas, which can be quickly removed for washing or sterilization. Frame made of rolled steel, 20 inches wide, and when folded is only 1½ inches thick.

Order from your
dealer or direct

**BUTLER BACK
REST COMPANY**

257 Fourth Avenue NEW YORK CITY

Price
\$3.50

Guaranteed
for 3 years



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Brosia Meals

Baking Powders

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Spices and Herbs

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Our Special Selections of Coffee and Tea

We afford you the advantages of direct dealing with a house which puts up goods of finest quality, in packages of utmost convenience for institutions.

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Carnation Milk

Is Pure Milk

CARNATION MILK is just clean, sweet cows' milk evaporated in a vacuum to the consistency of cream, hermetically sealed in cans and *sterilized*. Nothing is added—nothing taken out but part of the water. This process insures against all contamination. The uniformity of quality thus secured makes Carnation Milk ideal for the feeding of infants, as well as for the diet of the invalid adult.

Investigate the Quality

Learn more about Carnation Milk—its quality and economy. Order a supply for a trial in your own home. Then you will gladly recommend it. Use Carnation Milk in making soups; for cooking, baking, drinking and every other milk use. To reduce its richness simply add pure water.

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"The Story of Carnation Milk" booklet on our sanitary methods of handling, and containing 100 recipes for plain and fancy cooking—infant feeding, etc.—sent free upon request. Carnation Milk Products Company, 610 Stuart Building, Seattle, Wash.

Remember—Your Grocer Has
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IS THE NAME OF
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Waterproof Sheeting and Sheets

NOT experimental, as it has been used by
hospitals and physicians for ten years.

Reg. in U. S. **TRADE**
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ImpervO Clothing
in the Trenches

Contains no rubber—positively impervious to oil, grease, acids, blood, urine, or other deposits—easily cleaned with soap and hot water—can be sunned, aired, and steam-sterilized without cracking, blistering, or peeling. ImpervO is sanitary, soft, non-heating, and durable.

Our K Cloth ImpervO makes ideal Waterproof Clothing.
We make Pommel and Patrol Coats, Army Capes
and Trench Vests for soldiers.

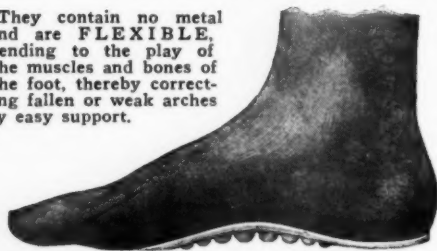
E. A. Armstrong ImpervO Co.
143 N. Dearborn Street Dept. H CHICAGO, ILL.

Send for Armstrong Price Lists and Samples.

PERFECTION

AIR CELL ARCH CUSHIONS

They contain no metal
and are FLEXIBLE,
bending to the play of
the muscles and bones of
the foot, thereby correct-
ing fallen or weak arches
by easy support.



Perfection Air Cell Arch Cushions have
decided advantages over other arch supports.

They are made of the finest quality of leather, with
a pneumatic cushion back. This cushion is com-
posed of numerous small rubber teats, each one an
air cell. They produce a comfortable, springy feeling
and at the same time perfectly ventilate the shoe.

Just the thing for hospital superintendents, physi-
cians, interns, nurses, or patients. They eliminate
nervous irritation and foot discomfort, building up
the health and welfare of the patients and hospital
staff.

Write for further particulars and prices.

ELASTIC TIP COMPANY

370 Atlantic Ave.

Boston, Mass.

CLASSIFIED ADVERTISING.

Under proper headings this column will present advertisements of
Positions Wanted, Positions Open, Articles for Sale, etc.

When requested, replies, will be received at the business office of
THE MODERN HOSPITAL, Metropolitan Building, St. Louis, and will be
forwarded promptly to the advertiser.

The charge for classified advertisements is 5 cents a word, with a
minimum charge of \$1.00 for single insertions. Orders for three or
more times will be accepted at the rate of 4 cents a word, with a
minimum charge of \$1.00.

POSITIONS WANTED.

ANESTHETIST—Registered nurse, trained anesthetist, with experience,
wishes position as anesthetist in hospital or with firm of doctors.
Address V. I. C., THE MODERN HOSPITAL, Metropolitan Building,
St. Louis.

DIETITIAN—A graduate of the Sanitarium School of Home Economics
wants position as dietitian in Middle West. Address I. U. A., THE
MODERN HOSPITAL, Metropolitan Building, St. Louis.

HOSPITAL SERVICE—Superintendents, superintendents
of nurses, night superintendents, surgical general duty
nurses, dietitians, etc., with advanced hospital experience,
furnished anywhere in the world without charge. Aznoe's
Central Registry for Nurses, 30 North Michigan avenue,
Chicago. Cable address, Azcentreg.

HOUSEKEEPER—Woman with seven years' experience in hospital
management, buying, laundry, dining room, and help, desires position
as housekeeper; references. Address T. C. E., THE MODERN HOS-
PITAL, Metropolitan Building, St. Louis.

LABORATORY TECHNICIAN—Position desired as laboratory techni-
cian by graduate nurse experienced in routine examinations. Address
E. C. I., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

LAUNDRYMAN—Efficient, quick, reliable, and sober hospital laundry-
man desires charge of laundry; understands thoroughly how to do the
washing and keep machinery in working order; first-class work guar-
anteed; other propositions considered. Address E. S., Box 154, Inde-
pendence, Ia.

Notice to Hospitals

When in need of institutional nurses, please always re-
member that we have probably the largest list of high-grade
personally interviewed and selected nurses in this country,
and to better, more promptly, and satisfactorily meet your
requirements, we have established an agency in Chicago;
but when writing address us as formerly, Driver's Nurses'
Registry Company, 3235 Charlotte street, Kansas City, Mo.

NURSES—Central Registry for Nurses of the New York County Reg-
istered Nurses' Association Agency, 132 East Forty-fifth street, New
York City; telephone Murray Hill 8700; Irene B. Yocom, R. N.,
registrars. Graduate nurses for institutional positions and for private
duty. Hourly nurses.

PRINCIPAL OF TRAINING SCHOOL—A university graduate, regis-
tered nurse, and an experienced teacher, desires a position as principal
of a school for nurses. Address M. A., THE MODERN HOSPITAL,
Metropolitan Building, St. Louis.

SECRETARY—Woman wants position as physician's secretary or simi-
lar work in hospital or sanatorium; can furnish excellent references.
Address A. K., THE MODERN HOSPITAL, Metropolitan Building,
St. Louis.

SUPERINTENDENT—A superintendent now employed seeking a change
wants superintendency of a hospital of not less than 100 beds; guaran-
tee satisfactory work. Address M. B., THE MODERN HOSPITAL,
Metropolitan Building, St. Louis.

SUPERINTENDENT—Graduate nurse, with eight years' experience in
all departments of hospital administration, wants position as superin-
tendent of 100-bed hospital; at present employed. Address C. D. L.,
THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

SUPERINTENDENT—Physician, 52, with broad experience as a hos-
pital administrator, including supervision of the erection and equipment
of hospital buildings, and for several years in present position as super-
intendent of a large general hospital, would consider change; best of
reasons. Address C. A. P., THE MODERN HOSPITAL, Metropolitan
Building, St. Louis.

SUPERINTENDENT—Position wanted as superintendent or assistant
by registered nurse; understands purchasing; is economical, organizer,
instructor of nurses, with executive ability; employed. Address Efficient,
THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

SUPERINTENDENT—Registered nurse wants position as superintend-
ent of hospital or institution; six years' experience in present position.
Address R. B. C., THE MODERN HOSPITAL, Metropolitan Building,
St. Louis.

SUPERINTENDENT—Registered graduate of experience wants posi-
tion as superintendent of hospital and training school; excellent refer-
ences from present employers and others. Address R. L. M., THE
MODERN HOSPITAL, Metropolitan Building, St. Louis.

SUPERINTENDENT—Registered nurse desires position as superintend-
ent of hospital; salary less than \$100 per month not considered.
Address A. M. A., THE MODERN HOSPITAL, Metropolitan Building,
St. Louis.

Continued on page 58.

This New Range Is A Wonder For Cooking

Although less than four feet long it can do every kind of cooking for any ordinary family by gas in summer or by coal or wood when the kitchen needs heating.

There is absolutely no danger in this combination, as the gas section is as entirely separate from the coal section as if placed in another part of the kitchen.



The Range that "Makes Cooking Easy"

Note the two gas ovens above—one for baking, glass paneled and one for broiling with white enamel door. The large square oven below is heated by coal or wood.

See the cooking surface when you want to rush things—five burners for gas and four covers for coal. The entire range is always available as both coal and gas ovens can be operated at the same time, using one for meats and the other for pastry. It Makes Cooking Easy.



Coal, Wood and Gas Range

Gold Medal Glenwood

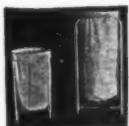
Write to-day for handsome free booklet 118 that tells all about it, to Weir Stove Co., Taunton, Mass. Manufacturers of the Celebrated Glenwood Coal, Wood and Gas Ranges, Heating Stoves and Furnaces.



Surgeons' Stools
No. CA-CNBB
No. CA-CNBS



Dish Carriage
No. EBK
2- or 3-Deck

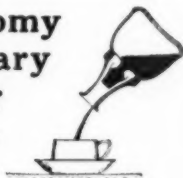


Linen Hampers
No. CSBC
No. CSBR



Dressing Carriage
No. CA-KBC

Economy Sanitary Sugar Server



One teaspoonful automatically saves 30 per cent—no dirt. For hospitals and institutions, and restaurants. Etched glass, \$2.00; silver-plated, \$3.00, postpaid, or at dealers. Agents wanted. Estimates given.

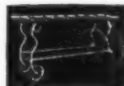
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Ash Cans
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Dust Pans
GARBAGE CANS
Glassware
KITCHEN UTENSILS
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Linoleum
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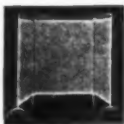
MATS, DOOR
Mops
MOP STICKS
Napkins, Linen
NAPKINS, PAPER
Oils and Polishes
PAIRS, ALL KINDS
Paper, Toilet
PAPER TOWELS
Paper, Wrapping
PILLOW CASES
Polish, Metal
FUBBER HOSE
Scoops, Coal
SHEETS
Silverware
SOAPS
Sponges
STEAM TABLES
Strainers, Tea
TABLES
Towels, Face
TOWELS, GLASS
Tooth Picks
TRAYS, WAITERS
Trunks, Hand
TUBS OF ALL KINDS
Twine
URNS, COFFEE
Wax, Floor



Urinal and Bed
Pan Stand
No. CA-ENC



Wheel Stretcher
No. CA-COCN

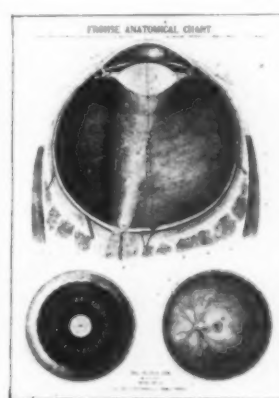


Folding Screen
No. CA-CXUB



Double Revolving
Solution Stand
No. CA-COKA-G

D. J. BARRY & CO.
83 Barclay Street, New York City



Frohse Eye Chart
Actual size, 35x32

WAR DEMANDS QUICK TRAINING OF NURSES

THE BEST WAY TO DO THIS IS TO USE

Frohse Life Size Anatomical Charts

American Edition by Prof. Max Brödel

Paste on a postal card with your name and address and mail.

Gentlemen:

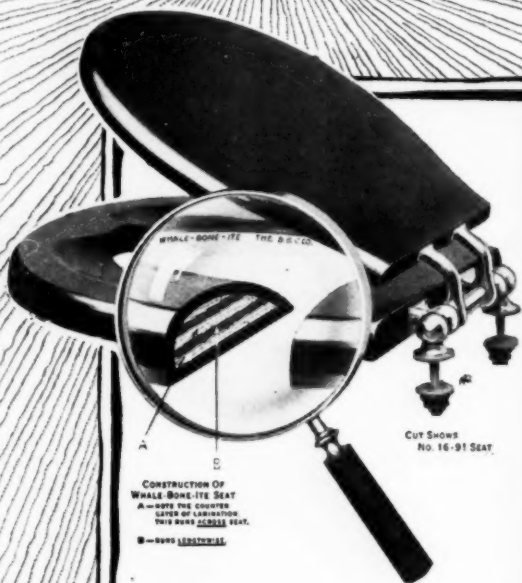
Send me free a colored reproduction and descriptive matter, that I may have detailed information about the Frohse Life Size Anatomical Charts.
M. H. 6-18

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That is what
Hospital Toilet Seats
must be
to **Assure Efficient
Service**

and
that is what

WHALE-BONE-ITE

a hard rubber product
is

Most durable.
Give them a trial
and be convinced
at same time
you will save money.

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THE BRUNSWICK-BALKE-COLLENDER CO.
625 WABASH AVE. CHICAGO.

CLASSIFIED ADVERTISING.

Continued from page 56.

POSITIONS WANTED—Continued.

SUPERINTENDENT—Superintendency of large general hospital wanted by graduate registered nurse with executive ability; six years in present position. Address M. A. S., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

SUPERINTENDENT—Woman with ten years' successful administrative experience wants position as superintendent or business manager; salary less than \$1,800 a year not considered. Address J. M. B., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

SUPERINTENDENT OF NURSES—Graduate nurse of seventeen years' experience desires position as superintendent of nurses of a state hospital training school or head nurse in tuberculosis sanatorium; East preferred; excellent references. Address C. S. M., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

SUPERINTENDENT OF NURSES—A graduate registered nurse, who has had executive and administrative experience, wants position as superintendent of nurses in a 100-bed hospital or as instructor in large hospital; references; East preferred. Address T. E., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

POSITIONS OPEN.

ASSISTANT SUPERINTENDENT OF NURSES—Wanted for 100-bed hospital; state age, experience, and other qualifications, also salary wanted. Address Presbyterian Hospital, Charlotte, N. C.

DIETITIAN—Dietitian wanted who is a practical housekeeper as well for 50-bed sanatorium located in New York city; good salary to right one. Address T. R., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

DIETITIAN—Graduate dietitian wanted for hospital in Virginia of 65 beds; must teach dietetics, do housekeeping and buying; young woman preferred; salary, \$60, board and laundry. Address A. P. D., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

DIETITIAN—Graduate dietitian wanted for hospital of 35 beds; must do housekeeping and buying. Address B., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

HEAD FLOOR NURSE—For 16-bed ward, private, 10 beds; salary, \$60. Apply to Miss E. P. Whicher, Superintendent Greenwich Hospital, Greenwich, Conn.

HOSPITAL SERVICE—Miss Baylies' Fifth Avenue Directory for Nurses, 8 East Thirty-Seventh street, New York, N. Y. Open day and night. Hospitals and institutions throughout the United States supplied with superintendents, assistant superintendents, operating room nurses, supervising and head nurses, dietitians, and housekeepers. Only graduates with first-class credentials from recognized training schools are considered.

HOSPITAL SERVICE—Physicians, surgeons, nurses, attendants, companions, house employees, etc., furnished for hospitals or institutions. Permanent position for nurses, any kind of work in any state. Practices of physicians, surgeons, dentists, and also veterinarians, handled and furnished in all the states. Drug stores for sale. Positions furnished in all states, whether hospital, doctor, nurse, dentist, druggist. Write me your wants. F. V. Kneist, R. P., Omaha, Neb.

HOUSEKEEPER—General hospital of 130 beds wants housekeeper; send details of experience, age, reference, and salary expected with first letter. Address T. H., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

INSTRUCTRESS OF NURSES—Eastern hospital needs instructress for training school of 50 pupils; must be well educated and capable of teaching all subjects found in a standard curriculum; state qualifications, with references, in first letter. Address O. B. H., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

LABORATORY TECHNICIAN—A lady technician wanted, one competent to do all kinds of blood work and tissue work; lady preferred, but will accept man; good salary and chance for promotion. Address W. C. Gewin, President Birmingham Infirmary, Birmingham, Ala.

NIGHT SUPERINTENDENT AND DIETITIAN—A 115-bed hospital in Southwest wants night superintendent and dietitian; first letter should mention school, age, salary desired, and give references; send photograph. Address G. N. B., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

NURSES—First unit county general hospital, Idaho, open for patients in June, will need supervisor, salary, \$75; operating room or surgical nurse, \$70; several duty nurses, \$65; general duty night nurse, \$65; with full maintenance; salaries will be raised \$5 per month with each year of service. Address I. D. A., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

NURSES—We have many very good paying hospital positions now open, and are looking for several graduate nurses to fill them; write today for our free book—it will tell you all about our registry and the work we are doing. Aznoe's Central Registry for Nurses, 30 N. Michigan avenue, Chicago, Ill.

Continued on page 60.



SPLENDID FOR CHILDREN

Swift's Premium Oleomargarine

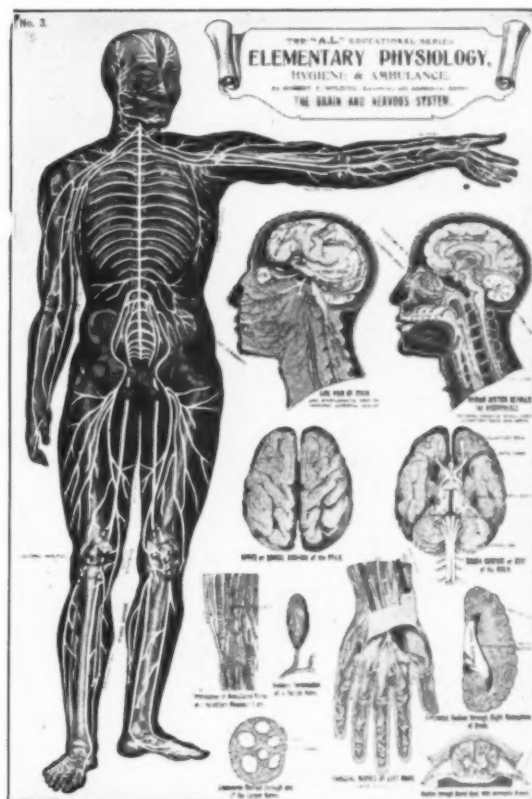
contains the elements of growth and nutrition that all children need.

It is cleanly made from the finest materials obtainable, and every operation is under Government inspection.

Economy before has meant sacrifice. Swift's Premium Oleomargarine enables you to save one-third on a staple food item at no sacrifice of taste, appearance, or nutrition.

Serve it and save.

Swift & Company
Chicago, Ill.



NEW LARGE CHARTS

For Nurse Training Schools

**Ready for
Immediate
Delivery**

**We Ship
on
Approval**

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Check below the items that interest you and we will send full particulars

- ☐ 8 Charts on Anatomy and Physiology
- ☐ 6 Charts on Hygiene and Health
- ☐ 6 Charts on Food
- ☐ 28 Models on Anatomy

Name and Office _____

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MH6-18

Chopped meats and vegetables for the summer months

Hamburger steak, sausage, croquettes, hash, fruit and vegetable salads, puddings, and other such dishes prepared with chopped foods are the most appetizing and digestible dishes for the hot summer months.

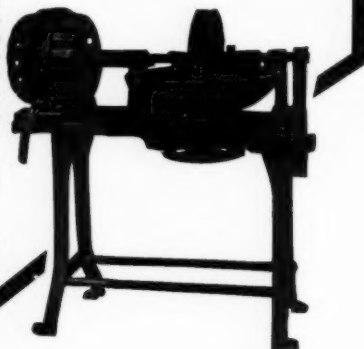
Buffalo Meat and Vegetable Choppers

offer the most satisfactory, efficient, and economical way of preparing food for such dishes. They are the only machines that cut all food fine without mashing it. They chop the food without wasting any of the nutritious juices or properties in it and at 200 to 600 percent saving in labor over any other method.

Besides, you can use up your cheaper grades of tough meats, also trimmings, which otherwise go to waste. \$25.00 to \$35.00 per month have been saved by institutions in their meat bills through using this machine.

Write for further particulars on this food bill and payroll reducer.

**John E. Smith's Sons
Company**
Buffalo, N. Y., U. S. A



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7th Edition

35,000 Words—Pronounced and Defined

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With Numerous
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Flexible Leather, Gilt Edges,
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Thumb Indexed, \$1.50, Postpaid

P. BLAKISTON'S SON & CO.
PUBLISHERS, PHILADELPHIA

CLASSIFIED ADVERTISING.

Continued from page 58.

POSITIONS OPEN—Continued.

NURSES—Nurses are continually being sought for positions in our 14 county tuberculosis sanatoriums; highest salaries paid those with previous sanatorium experience; we want superintendents, head nurses, ward nurses, practical nurses. Robinson Bosworth, M. D., 814 Lowry Building, St. Paul, Minn.

NURSES—Positions open for several nurses in 200-bed sanatorium for returned soldiers; new buildings; complete and modern equipment; new nurses' home; near large city. Applications, with references, should be addressed to Superintendent Queen Alexandra Sanatorium, London, Ontario, Canada.

Nurses Wanted

NURSES—Graduates, one surgical, \$60; two general duty, \$50; 35-bed hospital in beautiful Texas city on Gulf of Mexico; transportation advanced reliable nurses and deducted from first two months' salary; an unusual and fine opportunity.

We also want several general duty nurses, \$50 each, for splendidly located hospital, city 40,000, situated at foot of Blue Ridge Mountains.

Three nurses for hospital positions, most up-to-date city in Idaho, \$60 each.

One anesthetist, \$100, large hospital in Texas.

One x-ray and laboratory specialist, man or woman, fine hospital, most progressive city in Arkansas; this position most desirable, paying \$75 and liberal percentage.

One surgical nurse, \$75 or better, summer resort in city in Wisconsin.

Michigan hospital wants several general duty, \$55, and offers \$65 in new contagious department.

Pennsylvania wants several general duty nurses; day, \$50; night, \$55.

A live, progressive city in the heart of the oil district in Oklahoma wants three general duty nurses at \$65, one surgical at \$75. All above mentioned with maintenance, and very many others are immediate.

While in Chicago the first two weeks in May organizing a branch agency, Florence Driver Hoyt, president of this company, placed very many eastern graduates in most desirable positions at increased salaries. These high-grade, accomplished, refined nurses were astonished to find a registry taking so much personal interest in their welfare, and the care exercised to see that hospitals secured the proper assistants. Whether you wish immediate position or not, we believe you will feel well repaid in registering with us. Driver's Nurses' Registry Company, 3235 Charlotte street, Kansas City, Mo.

PATHOLOGIST—A 75-bed hospital in a southern city wants a woman physician as pathologist; salary, \$150 per month and maintenance. Address X. Y. Z., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

SUPERINTENDENT—A 50-bed hospital with training school wants superintendent with executive and administrative ability; state age, experience, education, and salary. Address S. A. H., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

SUPERINTENDENT—A thoroughly experienced medical man wanted as general superintendent of a general hospital of 600 beds. Apply E. A. Mott, Hon. Secretary-Treasurer Winnipeg General Hospital, Manitoba, Canada.

SUPERINTENDENT—An active, strong graduate nurse wanted as superintendent of private hospital with training school in New York city; must be thoroughly familiar with operating room work; salary, \$100 per month and full maintenance; give full particulars. Address A. P., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

SUPERINTENDENT—Small general hospital wants superintendent; new modern building; location 40 miles from Pittsburgh; give full particulars as to age, experience, and salary expected. Address H. R. S., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

SUPERINTENDENT—Woman wanted for 100-bed hospital and training school of 60 pupils; good salary; to avoid unnecessary correspondence, applications must be in own handwriting, giving age, experience, references, salary, present position, accompanied by recent photograph. Address E. B., THE MODERN HOSPITAL, Metropolitan Building, St. Louis.

TRAINING SCHOOL SUPERINTENDENT—The University Hospital, Augusta, Ga., 300 beds, is in need of a superintendent for training school of 75 pupils.

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Continued on page 62.

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In reply to your letter of March 7th we would say that the Incinerites installed in our new ward about a year and a half ago, have proved very satisfactory. I hope sometime that we shall be able to install them throughout the house.

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Yours truly,

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CLASSIFIED ADVERTISING.

Continued from page 60.

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A POST-GRADUATE COURSE OF FOUR MONTHS in practical and theoretical Hydrotherapy and Massage and Medical Dietetics to graduate nurses of approved training schools who wish to enroll in Red Cross Nursing Service for Reconstruction Hospital Service. Course begins June 4.

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CHILDREN'S HOSPITAL TRAINING SCHOOL FOR NURSES, DENVER, COLO.—Offers to young women between 18 and 30 a three-years' course, including twelve months in affiliated general hospital. Allowance and maintenance during training. Capacity of the hospital, 90 beds. For particulars address Superintendent of Nurses, Children's Hospital Training School for Nurses, Denver, Colo.

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Continued on page 64.

**Chocolate or Cocoa Blanc Mange**

$\frac{1}{2}$ cup Minute Tapioca 3 cups chocolate or
 $\frac{1}{2}$ cup sugar cocoa made proper
 Vanilla strength for drink-
 Salt ing

Add the Minute Tapioca, sugar, and a little salt to the chocolate or cocoa and let cook fifteen minutes, stirring frequently. Remove from the stove, flavor with vanilla and pour into a mold. Unless one wishes to mold this dessert another cup of chocolate or cocoa may be used. Serve cold with sugar and cream.

**Apple Tapioca**

$\frac{1}{2}$ cup Minute Tapioca 1 cup sugar
 1 tablespoon butter 1 teaspoon spice
 1 quart boiling water 6 apples
 $\frac{1}{4}$ teaspoon salt

Pare and quarter six large, tart apples. Place in a dish and pour over them the sugar, half of the salt, butter, and the spice. Cook fifteen minutes in a double boiler the Minute Tapioca, remainder of salt, and water. Pour this over the apples and bake until the apples are soft. Serve with cream and sugar.

Minute Tapioca



Every Spoonful of Minute Tapioca is a Spoonful of Strength

DAY by day you plan the diet and watch your patient respond to these spoonfuls of strength. Tapioca helps you, it is of recognized value as a strength-producing food, and easily digested.

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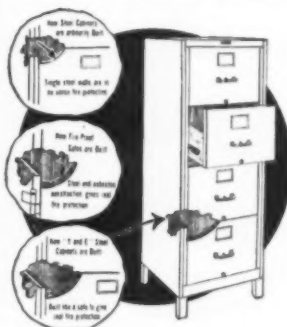
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A Gas Unit with a four-control, four-ring top burner.

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SOCIETY	PRESIDENT	SECRETARY	NEXT MEETING
American Association of Industrial Physicians and Surgeons.....	Dr. J. M. T. Finney, 1300 Eutaw Pl., Baltimore	Dr. Franklin Martin, 30 N. Michigan ave., Chicago	June 10, 1918, Chicago
American College of Surgeons.....	Lulu G. Graves, Lakeside Hospital, Cleveland, Ohio	Maude A. Perry, Michael Reese Hospital, Chicago	Oct. 21, 1918, New York City
American Dietetic Association.....	Dr. Arthur B. Ancker, superintendent St. Paul City and County Hospital, St. Paul, Minn.	Dr. William H. Walsh, 728 17th street, N. W., Washington, D. C.	Sept. 24-28, 1918, Atlantic City, N. J.
American Hospital Association.....	Dr. Rupert Blue, Bureau of Public Health Service, Washington, D. C.	Dr. Alex. R. Craig, 535 N. Dearborn st., Chicago	Sept. 24-28, 1918, Atlantic City, N. J.
American Medical Association.....	Dr. Chas. G. Wagner, superintendent Binghamton State Hospital, Binghamton, N. Y.	Dr. Henry C. Eyman, superintendent Massillon State Hospital, Massillon, O.	June 10-14, 1918, Chicago
American Medico-Psychological Association	Anne W. Goodrich, R. N., Teachers' College, Columbia University, New York.	Katharine DeWitt, R. N., 45 S. Union st., Rochester, N. Y.	June 4-7, 1918, Chicago
American Nurses' Association.....	Miss Jean Gunn, superintendent of Nurses, Toronto General Hospital	Miss Ethel Johns, Children's Hospital, Winnipeg	June 18-20, 1918, St. Francis Xavier's Academy, 4928 Cottage Grove ave., Chicago
Canadian National Association of Trained Nurses.....	Rev. C. B. Moulinier, Marquette University, Milwaukee, Wis.	Dr. B. F. McGrath, Marquette University, Milwaukee, Wis.	October 21, 1918, New York, N. Y.
Catholic Hospital Association.....	Dr. Fred B. Lund, 527 Beacon st., Boston.	Dr. Franklin H. Martin, 30 N. Michigan ave., Chicago	Sept., 1918, Columbus, Ohio
Clinical Congress of the American College of Surgeons.....	James Minnick, 8 Dearborn st., Chicago	Dr. Robinson Bosworth, Lowry Building, St. Paul, Minn.	June 6-8, 1918, Boston
Mississippi Valley Conference on Tuberculosis	S. Lillian Clayton, R. N.	Effie J. Taylor, R. N., Johns Hopkins Hospital, Baltimore	
National Association for the Study and Prevention of Tuberculosis.....	Mary F. Beard, R. N., 551 Massachusetts ave., Boston	Ella Phillips Crandall, R. N., 25 W. 45th st., New York	
National League of Nursing Education	Dr. F. W. Shelton, Independence, Kan.	Dr. W. R. Dillingham, Sabetha, Kan.	
National Organization for Public Health Nursing.....	G. W. Olson, Swedish Hospital, Minneapolis, Minn.	Mrs. Geo. G. Eitel, Eitel Hospital, Minneapolis, Minn.	
State Hospital Associations	F. S. Bunn, superintendent City Hospitals, Youngstown, O.	Dr. E. R. Crew, superintendent Miami Valley Hospital, Dayton, O.	May 28-30, 1918, Columbus, Ohio
Kansas Hospital Association.....	Dr. Wm. A. McMillan, superintendent McMillan Hospital, Charleston, W. Va.	Mr. Pliny O. Clark, superintendent Ohio Valley General Hospital, Wheeling, W. Va.	
Minnesota Hospital Association..	Dr. E. H. Young, Rockwood Hospital for the Insane, Kingston, Ont.	Dr. W. J. Dobbie, Toronto Free Hospital, Weston, Ont.	
Ohio Hospital Association.....	Helen Randal, East Burnaby, B. C.	Elizabeth G. Flaws, Wellesley Hospital, Toronto, Ont.	
West Virginia Hospital Assn.....	H. Wade Deacon, Royal Infirmary, Liverpool	Conrad W. Thies, J. C. Buchanan, Metropolitan Hospital, London	
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Canada Hospital Association.....			
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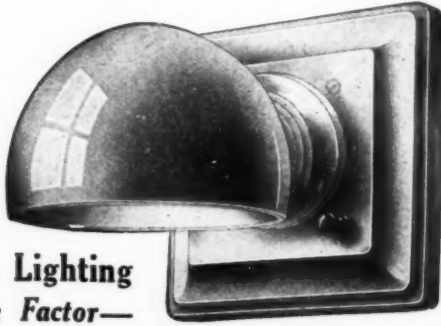


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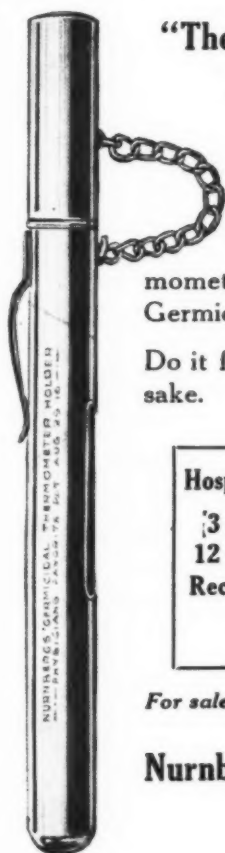
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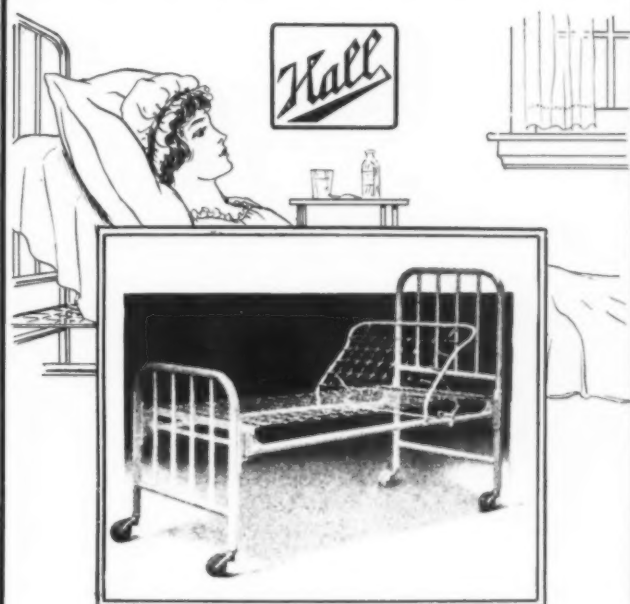
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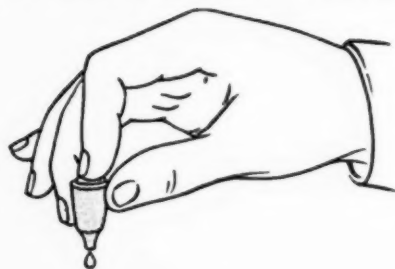
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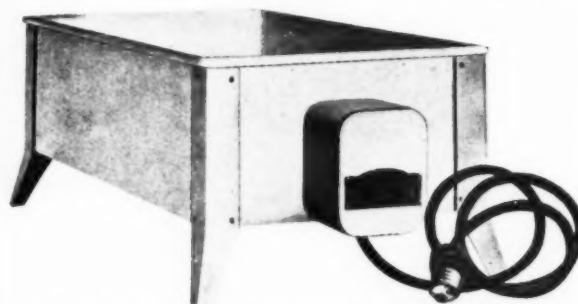
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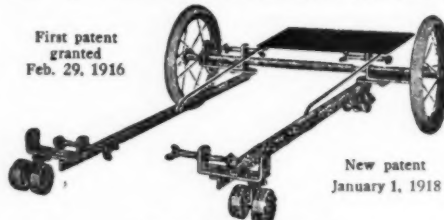
From a rocker to a wheel chair in two minutes

The Roll-a-Rocker is a new device thoroughly tested and proven, and intended to do away with the patient's expensive, old-fashioned rolling chair.

FITS ANY ROCKER
Collapsible, Adjustable

For Hospital and Home
For the price of just an ordinary wheel chair you can buy several Roll-a-Rockers.

First patent
granted
Feb. 29, 1916



New patent
January 1, 1918

Write for further information

THE ROLL-A-ROCKER CO.
INDIANAPOLIS, IND.



It's the *Hobart* Kitchen Aid

AN Auxiliary machine for the large kitchen—an all-round outfit for the smaller one.

Regular equipment consists of 10 and 3-quart bowls, five beaters and whips.

Has three speeds—high, low, and intermediate—and as well built as the larger famous Hobart Mixers.

Reduces Cost of Preparing Foods

The Kitchen Aid is an all-round kitchen machine. It

mashes potatoes, whips cream, beats eggs, mayonnaise, and all kinds of batters and doughs (ample power for bread dough). Fine for griddle cakes of all kinds.

Saves time, saves materials, increases volumes 15% to 20% including potatoes.

Enables you to operate with less experienced help.

Hundreds of these outfits now in service in all parts of U. S. Highly indorsed by kitchen operators in small and large institutions.

Special Attachments

Inexpensive attachments, including food chopper, fruit and vegetable slicer, coffee mill, ice cream freezer can be added to machine.



*Low Price—Prompt Shipment
Write for complete catalog K-1*

The Hobart Manufacturing Company, 48 Pennsylvania Avenue, Troy, Ohio

ACME CHLORINATED LIME

for Hospital and Home



This Curve of the Sink Drain is an Ideal Breeding Place for Germs

Greases and particles of dirt cling to the inside of the pipe in this pocket, and, unless the sink is thoroughly and frequently disinfected, germs breed rapidly in the accumulated filter, thus menacing the health of the occupants of the household or of the institution.

Acme Chlorinated Lime has been adopted by hundreds of hospitals as the most effective disinfecting agent which can be purchased with such prudent economy. It destroys the germs in the sink drains and in the lavatories, sewers, waste pans, douche tubs, etc. It has a further usefulness in that it is a deodorizing agent as well.

You will be furthering the propaganda of health and cleanliness by advising the liberal use of Acme Chlorinated Lime in the homes of your patients and friends. Its convenient packing in popular priced cans, combined with its multiple household uses, recommend it for the home.

Remember, Acme Lime is always fresh and effective—an important desirability in a sanitary agent.

*We Shall be Glad to Send You
Samples and Literature*

THE MENDLESON CORPORATION
New York City, N. Y.

Factories, Albany, New York

Established 1870



If germs were as big as rabbits—

- ☞ If germs were as big as rabbits, absolute cleanliness and sterilization would be unnecessary.
- ☞ But because they are visible only through the most powerful microscopes—that is why germs are so dangerous.
- ☞ They are like an ever-present, unseen foe—ready to strike without the slightest warning.
- ☞ Hospitals and sanatoria of all kinds realize the danger of infection even through the medium of dishes, glasses, knives, and forks.
- ☞ That is why hundreds of institutions wash all of their dishes in Crescent Dish Washers.
- ☞ The Crescent not only washes all of their dishes absolutely clean, but it also facilitates sterilization to a high degree.
- ☞ Send for our illustrated booklet. It has an interesting message for you.



A few of the hundreds of hospitals and sanatoria that use and endorse the Crescent.

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New York Hospital,	New York
St. Mary's Hospital,	Detroit
Chicago Lying-in Hospital,	Chicago
Wills Hospital,	Philadelphia
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"We are pleased to state that this machine is thoroughly satisfactory and has effected considerable *saving* in meats—not only a saving, but has enabled us to *serve* our meats in a more satisfactory and appetizing manner. I do not think it would be possible for us to get along without a machine now that we have learned its many advantages, and I feel thoroughly convinced that every institution having a large number of people to whom to cater should have one. Shall be glad to have you give my name as a reference to any prospective buyer.

Yours very truly,

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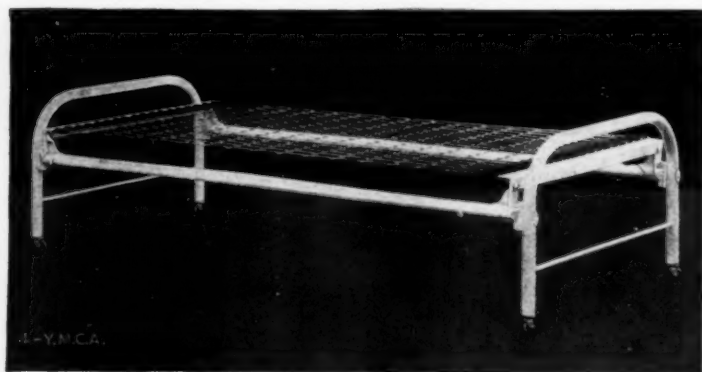
Give us the opportunity to prove this to your own satisfaction. Write for booklet today.

U. S. SLICING MACHINE COMPANY, LA PORTE, INDIANA

	<h2 style="text-align: center;">Liquid Petrolatum Squibb</h2> <h3 style="text-align: center;">(Heavy Californian)</h3> <p style="text-align: center; font-size: small;">Refined under our control and exclusively for us only by the Standard Oil Company of California which has no connection with any other Standard Oil Company</p>	
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FOR INFANTS AND CHILDREN OF ALL AGES IS A PALATABLE, SAFE, EFFICIENT REGULATOR OF THE BOWELS • IT NEEDS NO MENSTRUUM OR FLAVORING • WILL NOT FORM A HABIT

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The Bed For The Nurse

For the nurses' dormitory, or for the nurse in the patient's room, No. 4, shown here, fills a real need. Head and foot are only 22 inches high, so that this bed can be rolled under regular hospital bed if desired. Also makes up nicely as a divan, for use in nurse's room.

New Bed Catalog on Request

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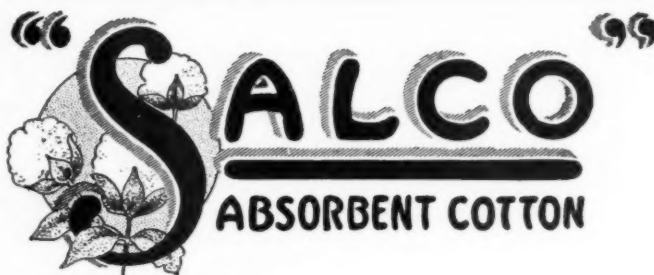
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“Ready for use with the addition of water.”

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Advantages of the Powders:

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PLAIN CATGUT—CHROMIC CATGUT
Plain Bartlett Catgut (Iodized) 20-Day Bartlett Catgut (Tanned Iodized)

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The most economical: Because it sprays the liquid in the form of a vaporized stream, thereby hastening evaporation and consequent anesthesia, using one-tenth the liquid used by other tubes. Because the Ethyl Chloride is put up in a metal tube that will not leak or clog, and the liquid is guaranteed to maintain its purity indefinitely.

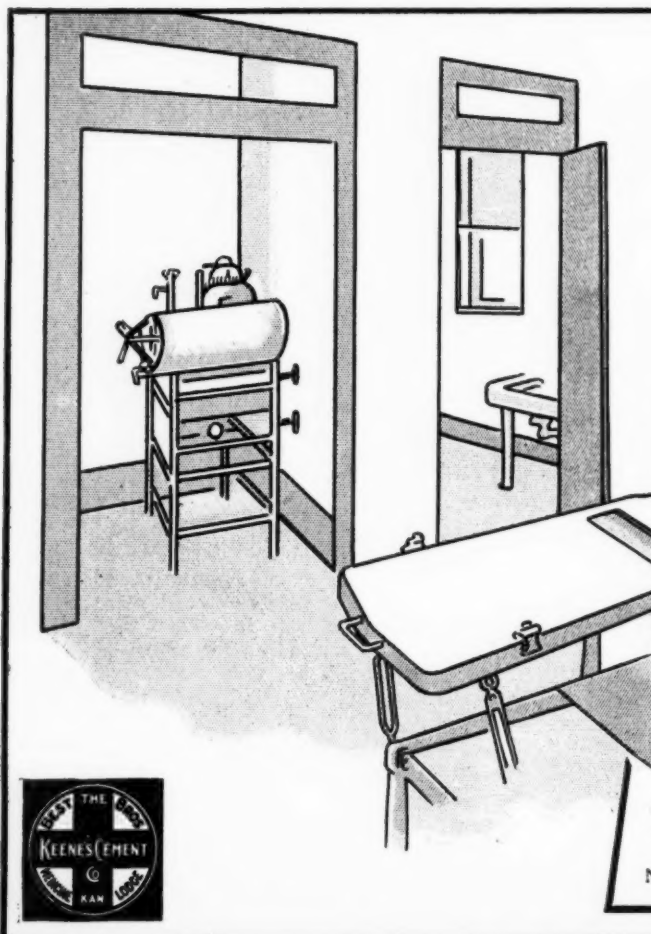
40-gram tube with ordinary spraying nozzle...\$1.10
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for the Operating, Sterilizing,
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Best Bros. Keene's Cement

walls to which a proper coating of paint or enamel has been applied withstand frequent and severe washings without any appreciable deterioration.

In corridors, wards, private rooms, and kitchens, walls of **Best Bros. Keene's Cement** stand hard knocks, steam, moisture, and wear.

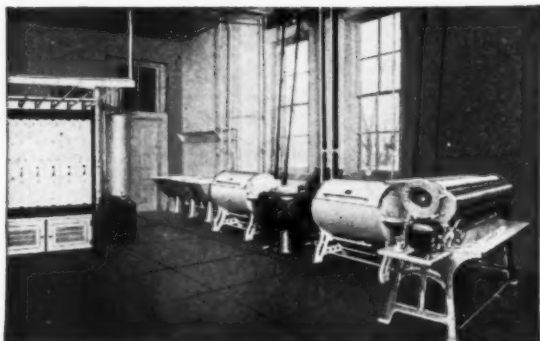
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CLEAN LINEN AT SMALL COST



The constant need of quantities of fresh, clean linen is most economically supplied by the hospital which has installed complete laundry equipment, consisting of a correct size washer, extractor, dryer, and a

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The cost of installing and operating such equipment is slight compared to the large saving effected. No hospital is too small to profitably have its laundry done on the premises.

We shall be glad to give you the benefit of our experience in suggesting the proper size and weight machines for your needs.

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Great Advances

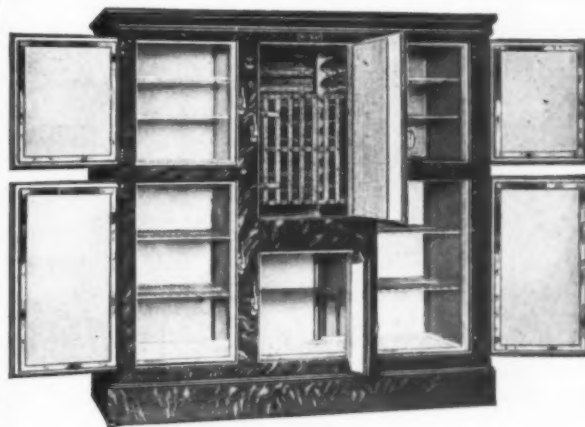
have been made in the mechanics of surgery in recent years—among them the EXCELSIOR Universal Wire Gauze Splint. The desirable splint for any use. Valuable in suspension. Does not prevent wound irrigation, ventilation or inspection. Lighter and less bulky than wood or similar splints. Easily molded to fit any irregularity. Gives complete protection and immobility.

The EXCELSIOR Wire Gauze Splint costs less than other splints. Send for Booklet 3. If your dealer cannot supply you, write us direct.

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McCRAY

Sanitary Refrigerators

keep milk and all perishable foods fresh, healthful, and free from taint and odors. The McCRAY Patented System insures a constant circulation of cold, dry purified air throughout every food compartment. Germs, microbes, and bacteria cannot live in this cold, dry air.

Let Us Send You Catalog

which illustrates the different styles of McCRAY Refrigerators, arranged for either ice or mechanical refrigeration. Special sizes are built to order for special needs. Write today for catalog—

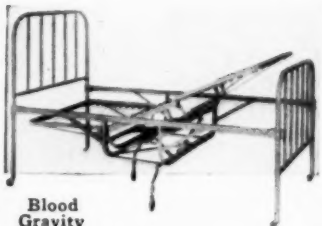
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Blood Gravity



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Jarless—Positive—No Ratchets

CONFORMS to *every* approved position for convalescence, including true Fowler, Trendelenburg, and all other standard postures.

Each position reached—or moved—without labor to nurse or possibility of shock or jar to patient. Automatically locked at every degree of every position, yet moves at a touch.

No dangerous ratchets or delicate mechanism. Cannot balk, stick, or get out of order. Extremely rugged construction.

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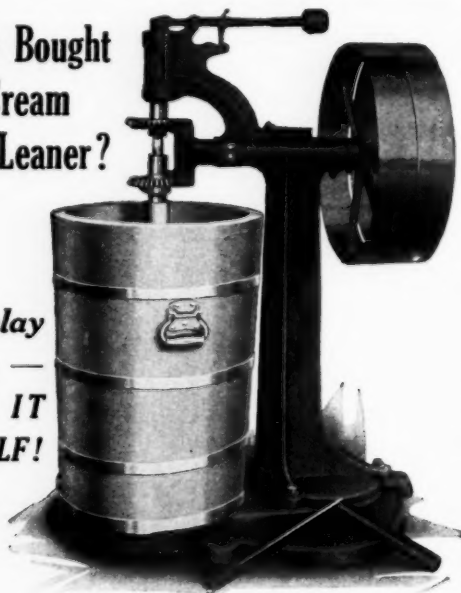
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Ice Cream
Getting Leaner?

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Better play
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**MAKE IT
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You'll pay for your own "Perfection" Freezer out of part of your saving—and *know* what goes into every dish of cream you serve.

Run it, side-by-side, with *any* other make of freezer of the same capacity and you'll understand why "Little Old Cedar Rapids" has put it all over New York, Philadelphia, and Chicago—and a dozen smaller "burgs" in the bargain.

The pictures tell only part of the story. Send for our catalog for the whole-of-it.

J. G. CHERRY CO. : : Cedar Rapids, Ia.

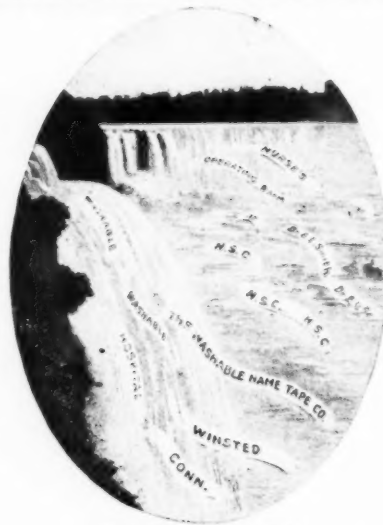
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Identify your clothing with our TAPES.

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**TEN
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NET WEIGHT
1/6 OUNCE

PREPARED ONLY
BY
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Improved Milk

JUNKET is *improved* milk, because it is milk already coagulated and thus ready for easy and complete digestion.

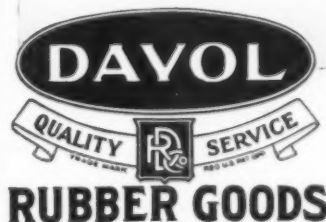
Junket

MADE with MILK

Also it is more enjoyable to the taste than plain milk—more acceptable to the patient as a diet. Often proves to be the very food that saves the case.

Send for treatise "Junket in Dietetics" and free samples of Junket Tablets.

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There is a difference—a degree of quality—resulting from no one feature or process, but the sum total of a thousand and one advances covering 44 years of manufacturing development.

You can judge of quality only in actual use—we cannot prove quality by words—the proof is built into the product—longer service, greater durability—economy. An "India rubber constitution" to resist the wear and tear of hospital life.

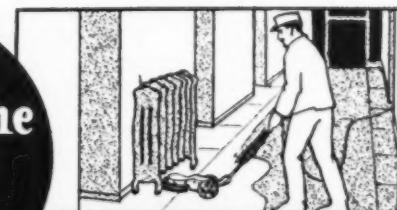
Davol Rubber Company

Providence, R. I., U. S. A.

Established 1874



Floors Cleaned the Finnell Way



Are 100% Clean

Hand-scrubbing removes surface dirt only. Besides, it's slow and sloppy! Power Scrubbing—the Finnell Way—leaves floors bright and shining as "a new pin." It means 100% sanitation.

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This machine does quickly and noiselessly the work of four scrub-women. It soon pays for itself by saving time and labor.

Attach it to any electric light socket. With swift, rotary strokes it swoops down on unsuspected dirt and routs it! The "No Man's Land" of the hand-scrubber—the hard-to-get-at dirt—does not exist for this energetic little machine. Write for particulars.



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How many times have you tried to find a clean, sanitary and at the same time easily accessible way of keeping milk and buttermilk ready to serve—something which would do away with the old-fashioned and unsatisfactory method of serving from bottles?

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We will gladly send you our catalog giving complete descriptions and prices.

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COOLER HEADQUARTERS

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PEERLESS MOTOR DRIVEN FREEZER

No crank to turn. No noise. All gearing and mechanism is housed to prevent injury to operator and to prevent salt, ice, or dirt from getting in. Strong, durable, and efficient. 25 and 40-quart sizes.

Write us or your jobber.

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Hand, Pulley, and Motor Driven Freezers



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600 Rooms—600 Baths
\$2.00 Up

To be complete, your trip must include a visit to the Famous Rainbow Room.

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C. M. SNYDER, Managing Director
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*The entire
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always before
him*



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brings the entire hospital staff within speaking distance of the superintendent at all times and on a moment's notice.

THE AUTOMATIC ENUNCIATOR SYSTEM instantly locates the person searched for regardless of his or her whereabouts in the hospital. It assures a prompt compliance or answer to the message sent.

It is the quickest, most effective and satisfactory paging system for hospitals; likewise the best means of spreading general or specific messages or alarms to all parts of the buildings or to all buildings in the group.

It does away with delays, unnecessary noise, mistakes, and waste effort.

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May we send you a trial outfit for temporary installation in your hospital, where you and your directors may further observe its performance and advantages?

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"Iron Horse" Quality Hospital and Institution Metalware.

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"Iron Horse" Brand

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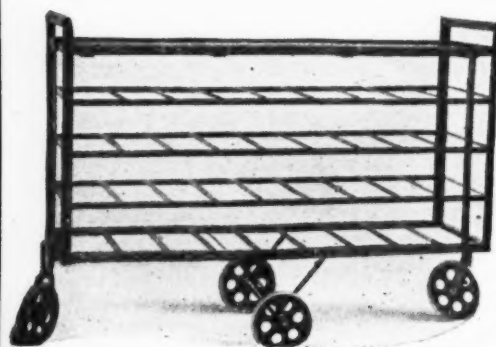
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THE MODERN HOSPITAL PUBLISHING COMPANY
Metropolitan Building, ST. LOUIS, MO.



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Eames Tray Trucks

Specially Designed for Hospitals and Sanitariums

**BUILT ENTIRELY OF STEEL, EXTREMELY RIGID
IN CONSTRUCTION, FINISHED IN BAKED ENAMEL**

The five tiers of this roomy truck easily accommodate 15 standard-size loaded food trays. For convenience, the top is a solid shelf with steel molding all round, designed to carry smaller articles when desired.

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Nonpareil Cork Tile

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has found favor through actual use in some of the most representative hospitals in the country:

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The acceptance of Nonpareil Cork Tile by institutions such as these is more than a coincidence. It is because Nonpareil Cork Tile floors, after thorough investigation, are found to be sanitary, durable, easy underfoot, non-slippery, restful in appearance, and can be readily laid over any type of base.

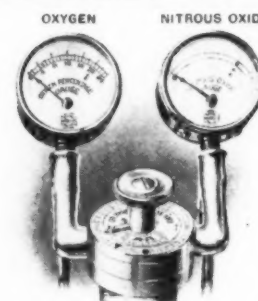
Complete information and samples will be sent on request.

DAVID E. KENNEDY, INC., 55 Fifth Avenue, New York City

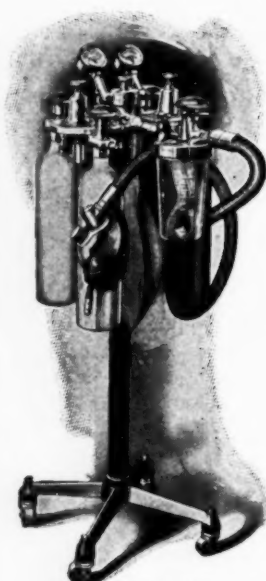
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Takes the guess out of gas



"The Heidbrink"

The same degree of accuracy is obtained in delivering definitely known percentages of Nitrous Oxid-Oxygen as in measuring a hypodermic injection of Morphin and Atropin or any other drug.

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"The apparatus that inspires confidence"

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will aid you in the administration of your hospital, as they will give you complete information at a glance.

Made to order to cover the special requirements of the institution wherein they are to be used.

Full equipment includes OPERATING ROOM BULLETIN BOARDS, DOCTORS' IN-AND-OUT REGISTERS, NURSES' ON-AND-OFF REGISTERS, PATIENTS' REGISTERS, VISITORS' REGISTERS.

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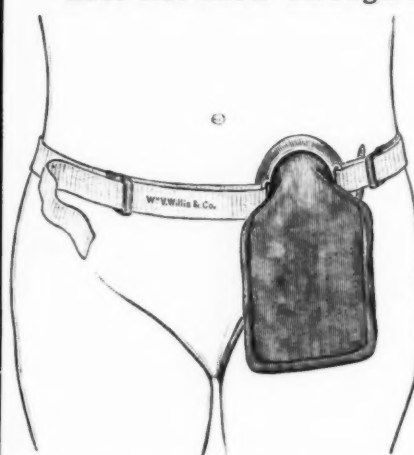
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go out with a comfortable and effective appliance which lies flat and does not show through the clothing.



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MATERIALS AND WORKMANSHIP employed in its construction are of the quality which only years of hard service will enable the owner to compute its annual depreciation.

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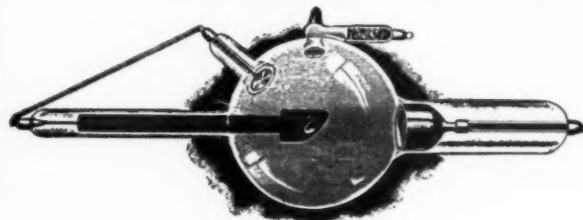
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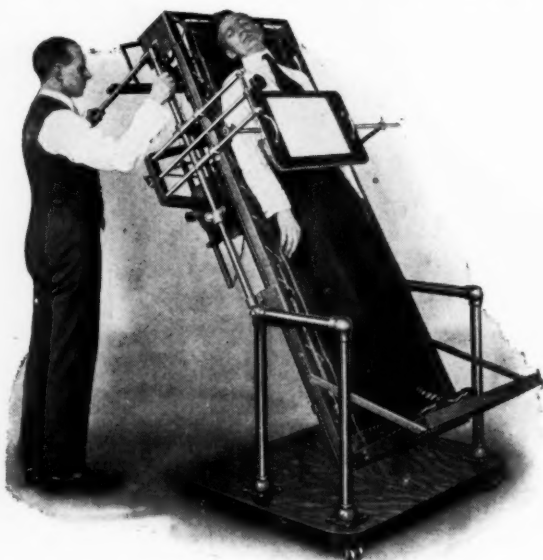
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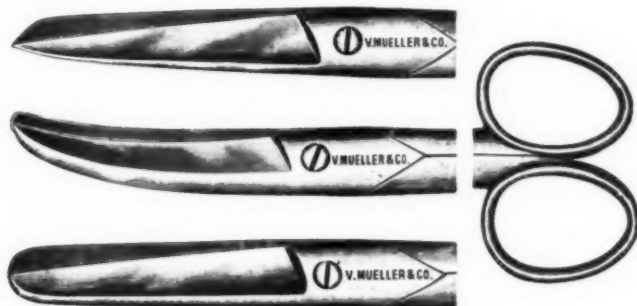
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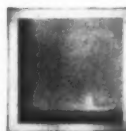
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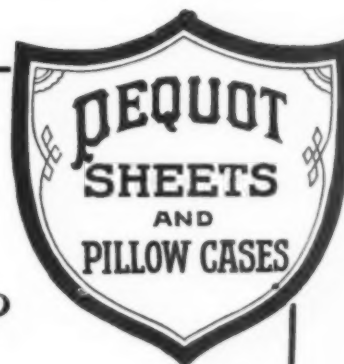
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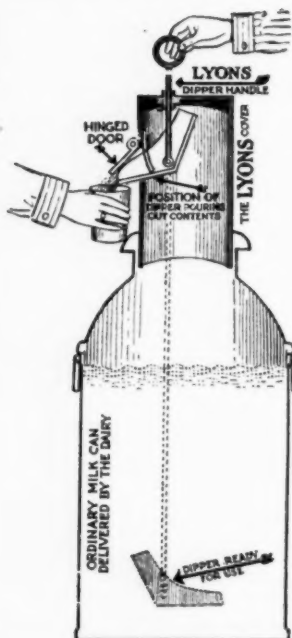
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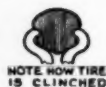
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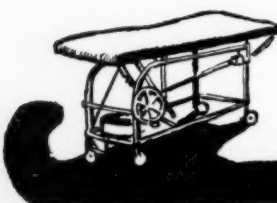
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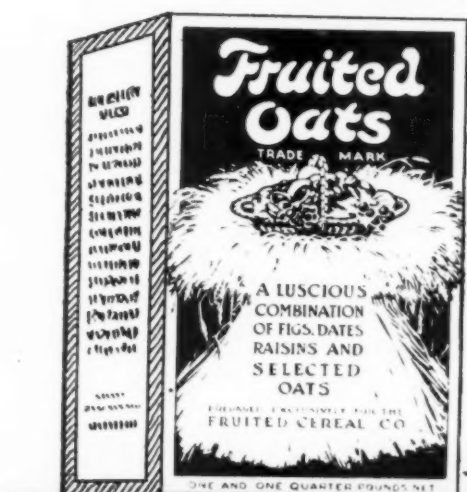
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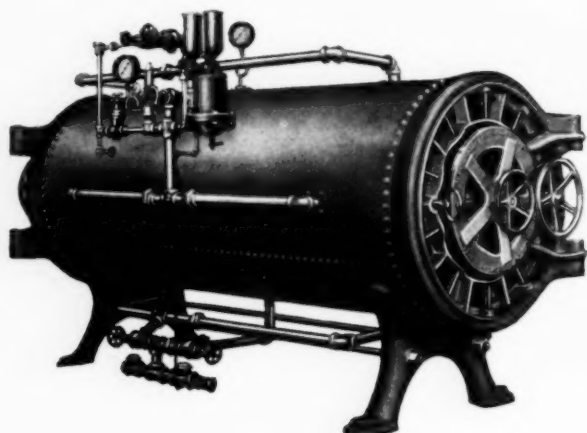
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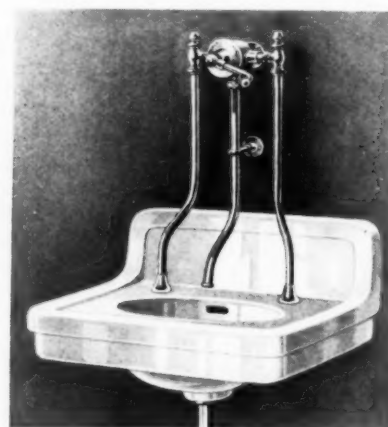
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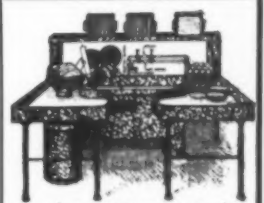
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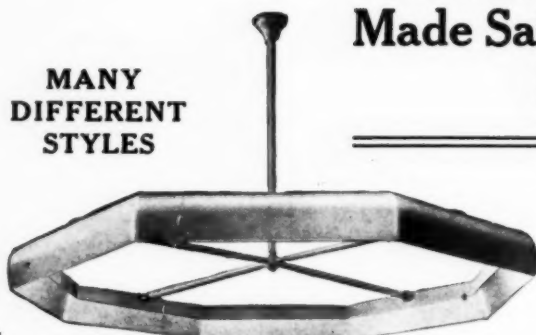
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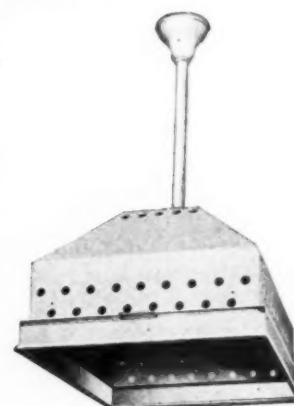
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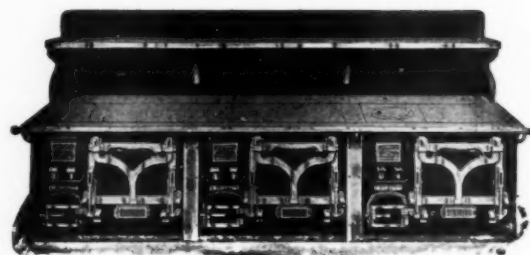
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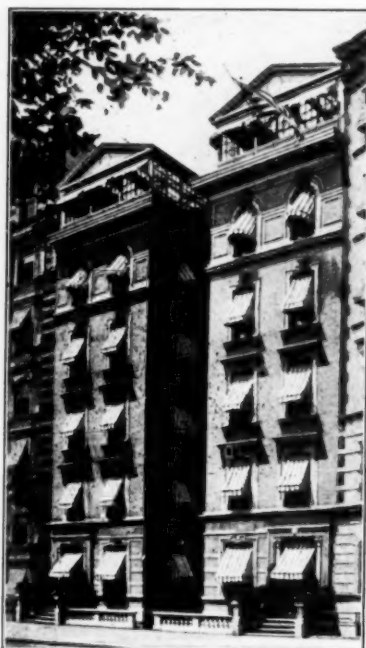
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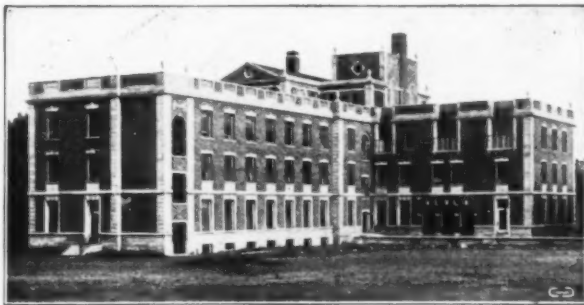
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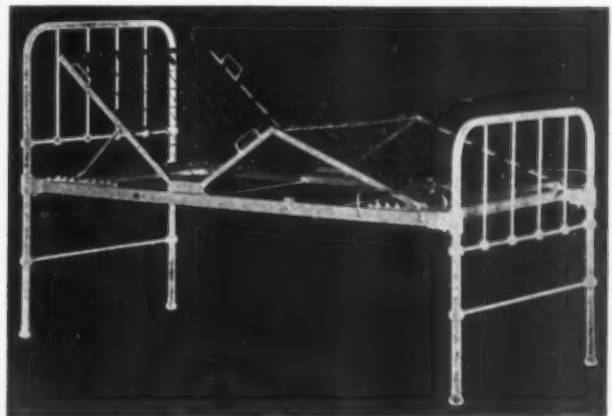
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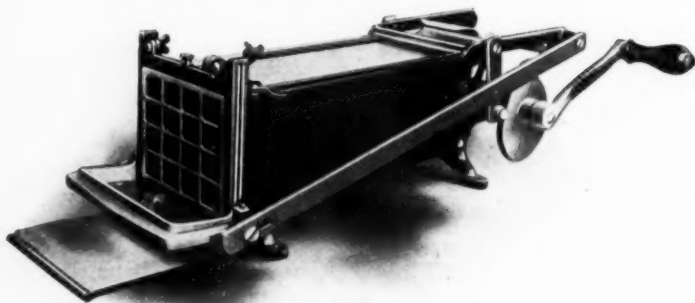
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"You also suggest that I try out other concerns."

"Mr. President, experimenting with this and that concern is a costly practice. Poor quality goods, delays in shipments, mistakes in orders, all cost money."

"In buying from Thorner Brothers, we get high quality goods at very fair prices indeed. The shipments are prompt, and there are very seldom any mistakes in filling the order."

"Why make costly experiments when we are getting quality, service, and fair prices? That's why I've always bought enamel and glassware, rubber goods, surgical gloves, sutures, and other supplies from this one concern."

This happened several years ago, and the superintendent continues to buy from

Thorner Brothers

Manufacturers and Importers of Aseptic Furniture, Sterilizers, and Hospital and Surgical Supplies.

386-390
Second Avenue



New York City



THE BUYERS' PAGE

Two things are necessary to the successful management of a hospital or like institution today. The first is an available supply of efficient and suitable hospital equipment and supplies. The other is a knowledge of the proper selection and application of such equipment and supplies to particular hospital needs.

The hospital superintendent is helped to the latter by the editorial columns of THE MODERN HOSPITAL, and to the first by the advertising pages of this magazine.

To assist superintendents and other hospital

officials to even a quicker and better buying of hospital accessories is the purpose of this page.

If you will indicate your immediate or prospective needs below, we will promptly put you into communication with those concerns best able to supply your requirements.

We trust that you will appreciate the time and trouble saved by this method and avail yourself of the advantages of this service whenever it will be a convenience to do so.

THE PUBLISHERS.

NOTE: Kindly indicate your needs below by placing the following marks in the square opposite the article: X if in immediate market, P if in prospective need, and I if merely interested in the item.

<input type="checkbox"/> ACCOUNTING AND CLINICAL RECORD SYSTEMS	<input type="checkbox"/> HOSPITAL EQUIPMENT AND SUPPLIES Specify nature	<input type="checkbox"/> Ice Caps <input type="checkbox"/> Patches <input type="checkbox"/> Sheeting <input type="checkbox"/> Tissue <input type="checkbox"/> Water Bottles
<input type="checkbox"/> AMBULANCES		SOAP <input type="checkbox"/> Cleaning <input type="checkbox"/> Laundry <input type="checkbox"/> Surgical <input type="checkbox"/> Toilet
<input type="checkbox"/> BEDS AND BEDDING		STERILIZERS <input type="checkbox"/> Dressing <input type="checkbox"/> Instrument <input type="checkbox"/> Mattress <input type="checkbox"/> Laundry
Beds	INSTRUMENTS <input type="checkbox"/> Diagnostic <input type="checkbox"/> Therapeutic <input type="checkbox"/> Surgical	SURGICAL SUPPLIES <input type="checkbox"/> Adhesive Plaster <input type="checkbox"/> Ligatures Specify nature
<input type="checkbox"/> Steel		
<input type="checkbox"/> Brass	<input type="checkbox"/> LAUNDRY EQUIPMENT AND SUPPLIES Specify nature	<input type="checkbox"/> Cotton <input type="checkbox"/> Gauze <input type="checkbox"/> Splints
<input type="checkbox"/> Wood		<input type="checkbox"/> THERMOMETERS, CLINICAL
<input type="checkbox"/> Bed Spreads	PAINTS <input type="checkbox"/> Enamel <input type="checkbox"/> Varnish <input type="checkbox"/> Wall Paint	UNIFORMS <input type="checkbox"/> Interns' <input type="checkbox"/> Nurses' <input type="checkbox"/> Orderlies <input type="checkbox"/> Operating Gowns <input type="checkbox"/> Bed Gowns <input type="checkbox"/> Aprons
<input type="checkbox"/> Blankets	<input type="checkbox"/> KITCHEN EQUIPMENT, DINING ROOM ACCESSORIES AND TRAY SERVICE Specify nature	<input type="checkbox"/> VACUUM CLEANERS
<input type="checkbox"/> Casters		<input type="checkbox"/> X-RAY EQUIPMENT Specify nature
<input type="checkbox"/> Mattresses		<input type="checkbox"/> MISCELLANEOUS
<input type="checkbox"/> Cotton Felt		
<input type="checkbox"/> Hair	PHARMACEUTICALS Specify nature	
<input type="checkbox"/> Pillows		
<input type="checkbox"/> Sheets	REFRIGERATORS	
<input type="checkbox"/> BRONZE TABLETS	RESUSCITATING DEVICES	
<input type="checkbox"/> BRUSHES	RUBBER GOODS <input type="checkbox"/> Catheters <input type="checkbox"/> Gloves <input type="checkbox"/> Heels	
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<input type="checkbox"/> DUMB WAITERS		
ELECTRICAL APPLIANCES <input type="checkbox"/> Fans <input type="checkbox"/> Heating Pads <input type="checkbox"/> Irons		
<input type="checkbox"/> FILING DEVICES AND SYSTEMS		
<input type="checkbox"/> FIRE EXTINGUISHERS		
<input type="checkbox"/> FOOD PRODUCTS AND BEVERAGES Specify nature		
<input type="checkbox"/> FORMALDEHYDE FUMIGATORS		
GARBAGE <input type="checkbox"/> Cans <input type="checkbox"/> Burners		
<input type="checkbox"/> HEATING SYSTEMS		

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Name of Writer _____

Name of Hospital _____

Address _____

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Ambulance Service

Increases Efficiency

An ambulance is part of a hospital's service. Without an ambulance the best hospital in the world lacks efficiency. It is helpless in emergencies. It cannot serve the community as it is a hospital's mission to do.

Comfort for the Patient

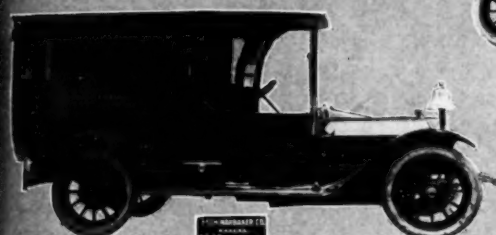
An ambulance must offer the maximum of comfort. For the sick comfort is a necessity, not a luxury. The ambulance must ride easily, and it must be designed so that patients may be handled without danger of injury.



State Hospital, Hazelton, Pa.



Pottsville Hospital, Pottsville, Pa.



Presbyterian Hospital, Philadelphia, Pa.



Department of Safety, Utica, N. Y.



Jefferson Hospital, Philadelphia, Pa.



German Hospital, Philadelphia, Pa.

First Aid Conveniences

The ambulance must also be designed with the attendant in mind. Every article of first aid in fracture, wound, or suffocation should be convenient to his hand. Lighting and ventilation, working space, hot and cold water, are also subjects of careful planning.

Concerning Ourselves

We have made ambulances for years—both horse-drawn and motor—and in our ambulances are embodied the ideas of both hospital experts and mechanics. We have made hundreds of special ambulances and can meet any demands made upon us.

SEND FOR OUR COMPLETE CATALOGUE

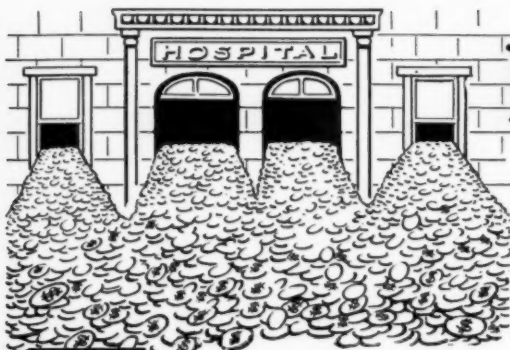
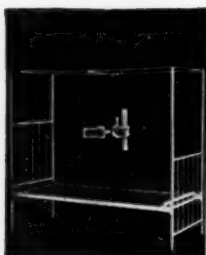
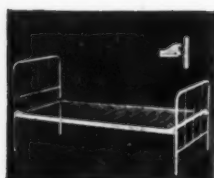
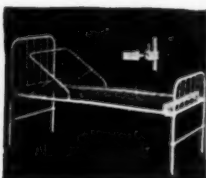
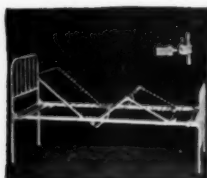
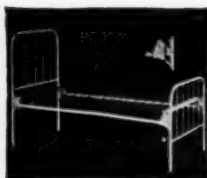
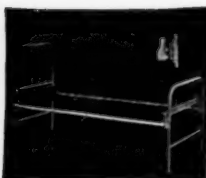
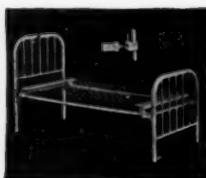
RECH-MARBAKER COMPANY

Girard Avenue and Eighth Street, Philadelphia, Pa.

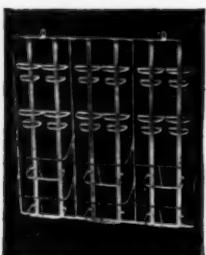
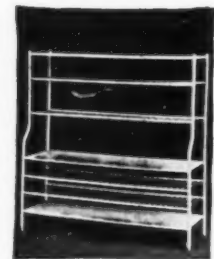


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Nobody
wants to support a
hospital in which
money flows out as
fast as it comes in.



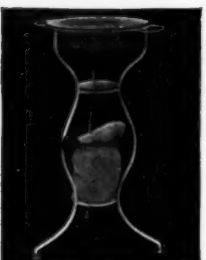
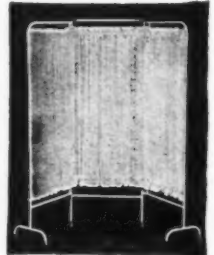
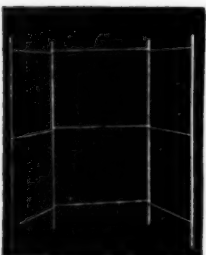
In other words, it is easier to raise money for a paying hospital than it is to raise money for one that is a continual source of expense.



HOSPITAL equipment, beds and the like, unless of the best, are persistent makers of trouble and expense.

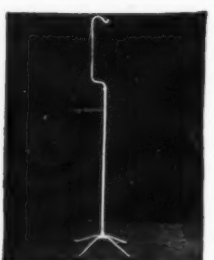
IF a new hospital, you will find it easier to secure the additional \$200, \$2,000, or \$20,000 necessary to install *good* equipment than you will find it in raising money to take care of annual deficiencies after the hospital is completed.

IF an old hospital, you will find money forthcoming if the plan assures contributors that the leak has been stopped, and that you do not intend to merely replace a bed or a piece of equipment here and there, but that you are going to throw out all of the old, expense and trouble-making stuff and put the institution on an economical and efficient basis from cellar to garret.



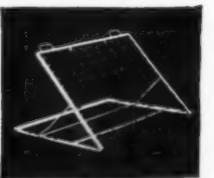
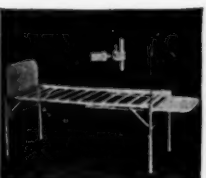
THERE are several lines of hospital beds and equipment cheaper in price than the SMITH & DAVIS line, but there are none which will surpass it for quality, workmanship, and practical and sanitary design. What is more and what is most important, *you know* that you are getting one dollar's worth of service and satisfaction for every dollar spent.

THE hospital buyer—and years of reputation and actual performance back up this claim—knows that, in installing SMITH & DAVIS beds and equipment, the hospital is fitted out with equipment that will give the maximum comfort to patients—equipment which possesses all of the essentially hygienic features necessary to the preservation of health and life—equipment that will lighten the tasks of the staff and put the entire hospital on a more efficient and economical basis.



Our new catalogue has just come from the printers. May we send you a copy?

SMITH & DAVIS MFG. CO.
St. Louis, Mo.



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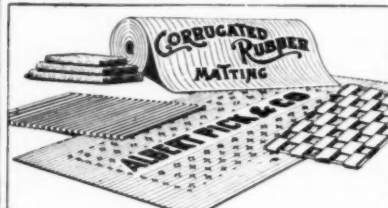
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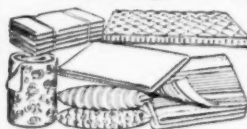
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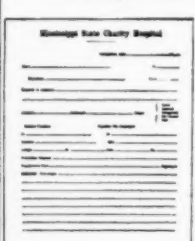
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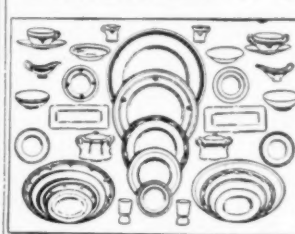
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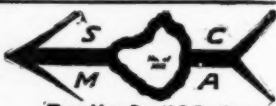
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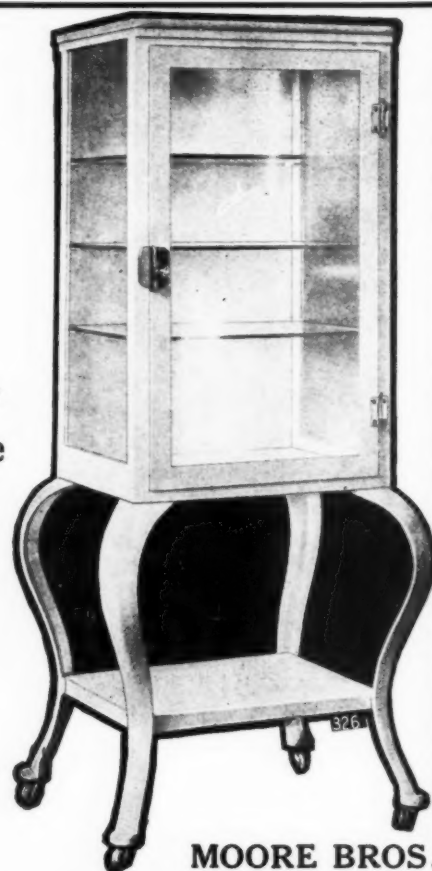
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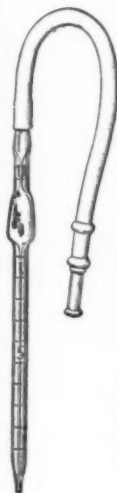
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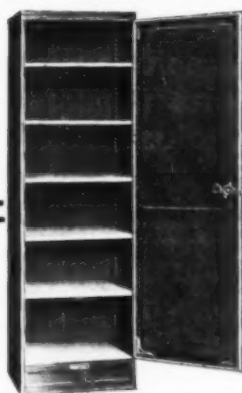
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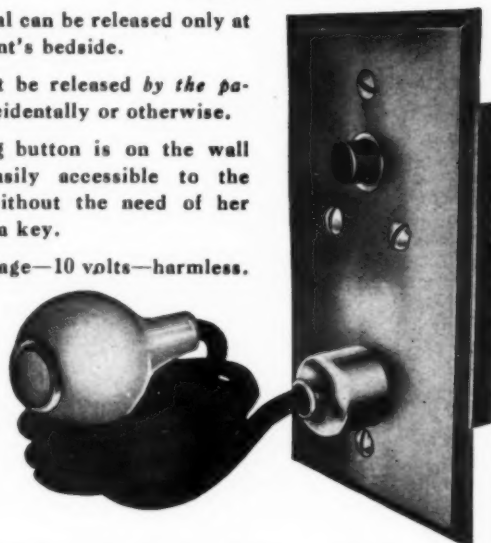
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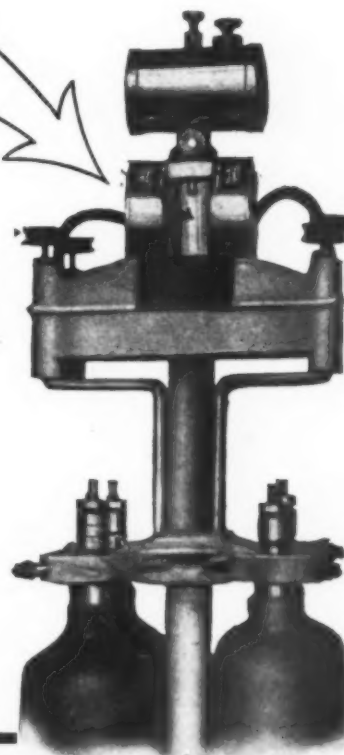
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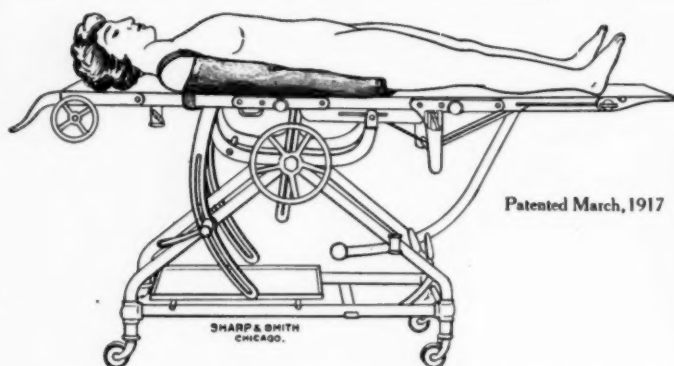
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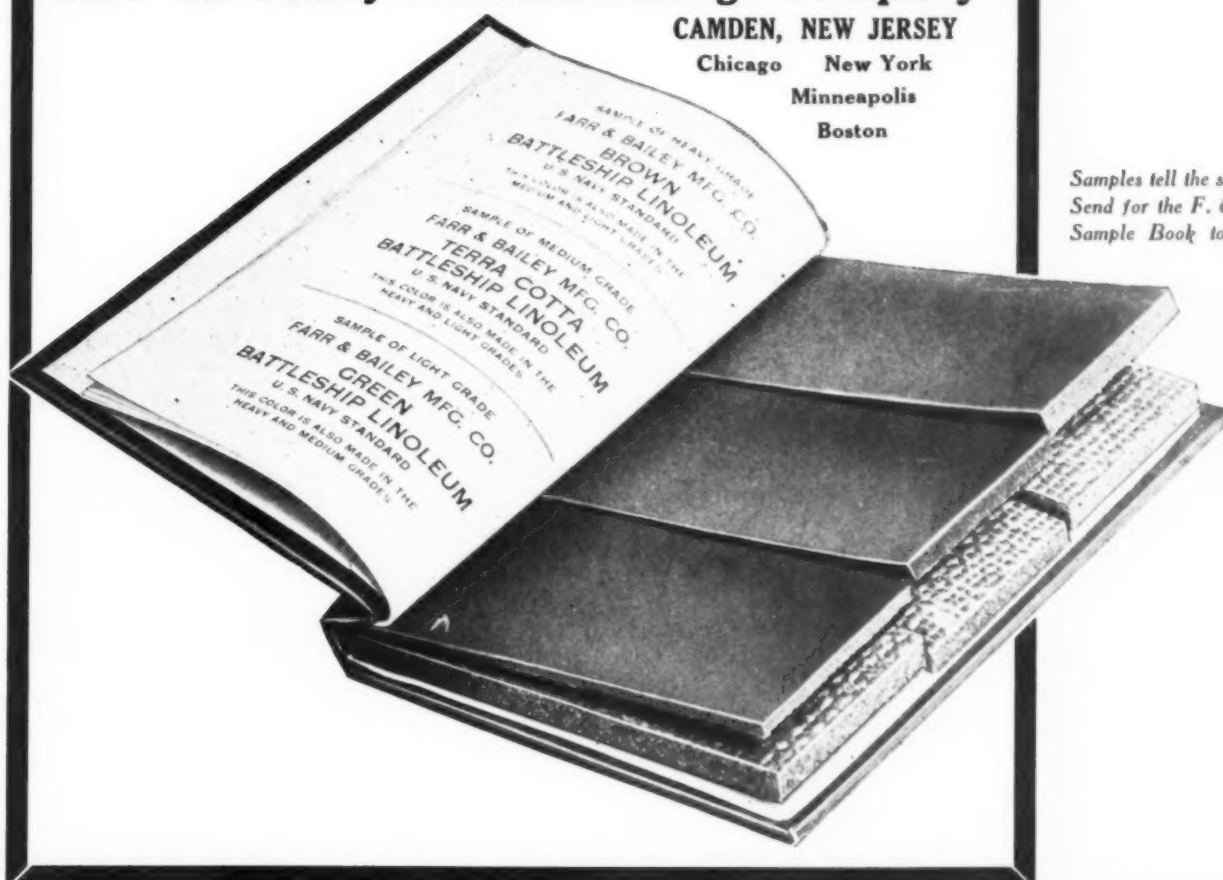
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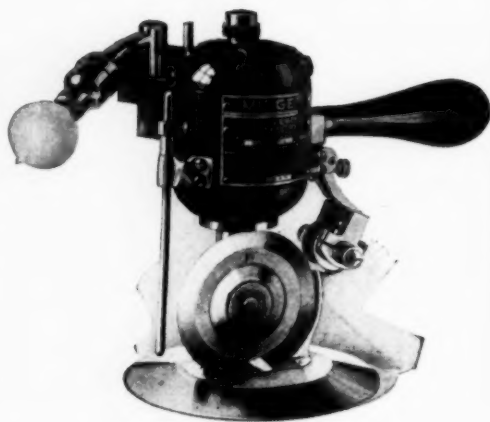
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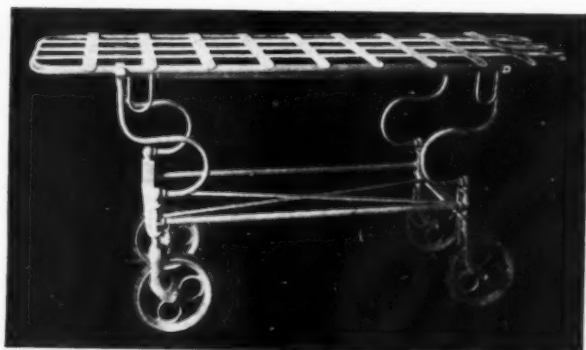
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Columbus Aseptic Furniture Co.

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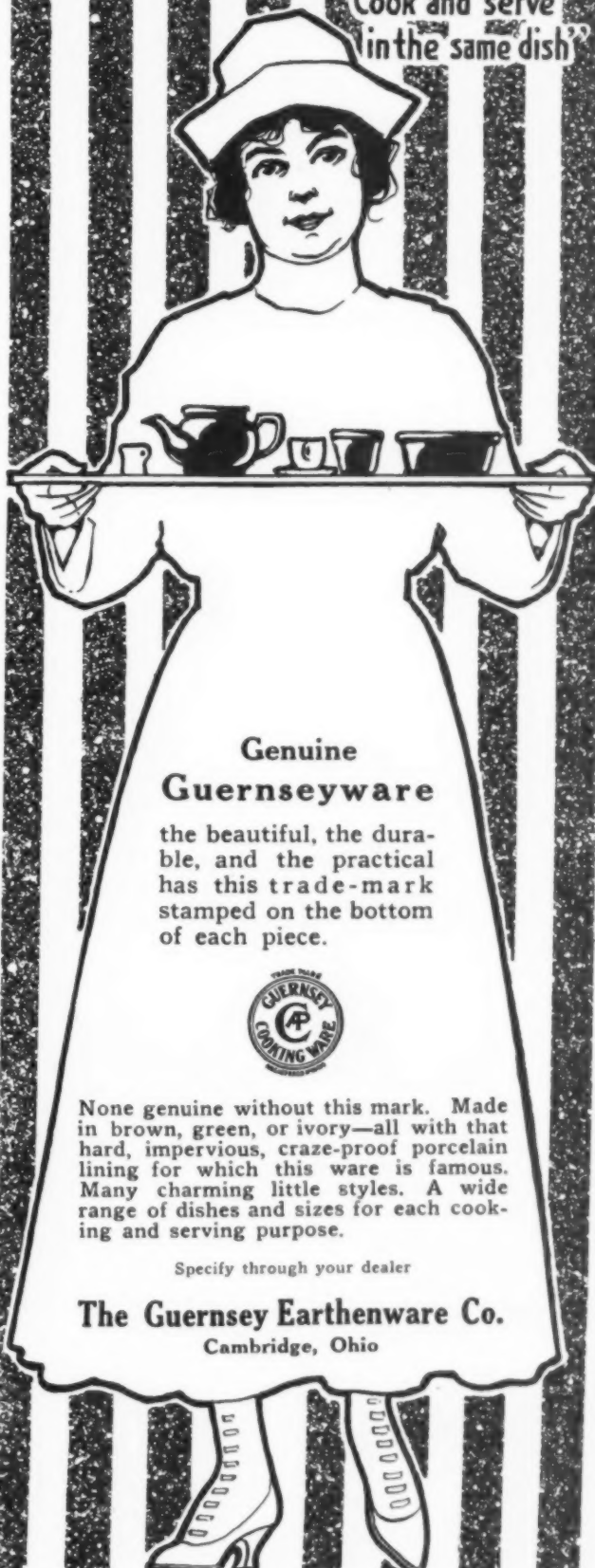
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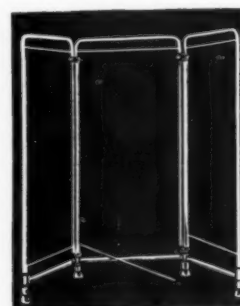
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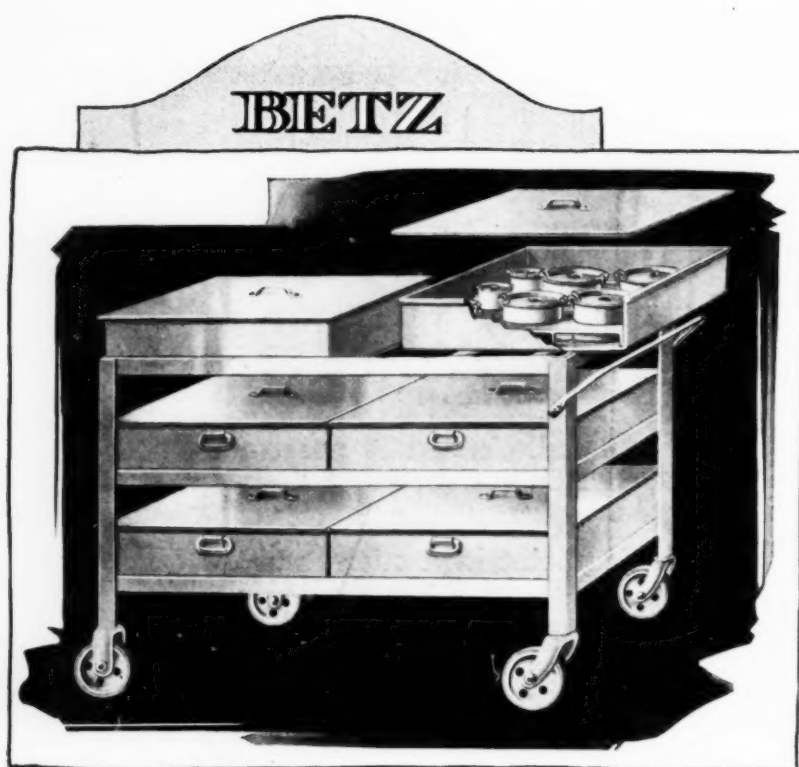
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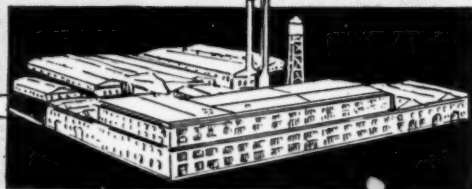
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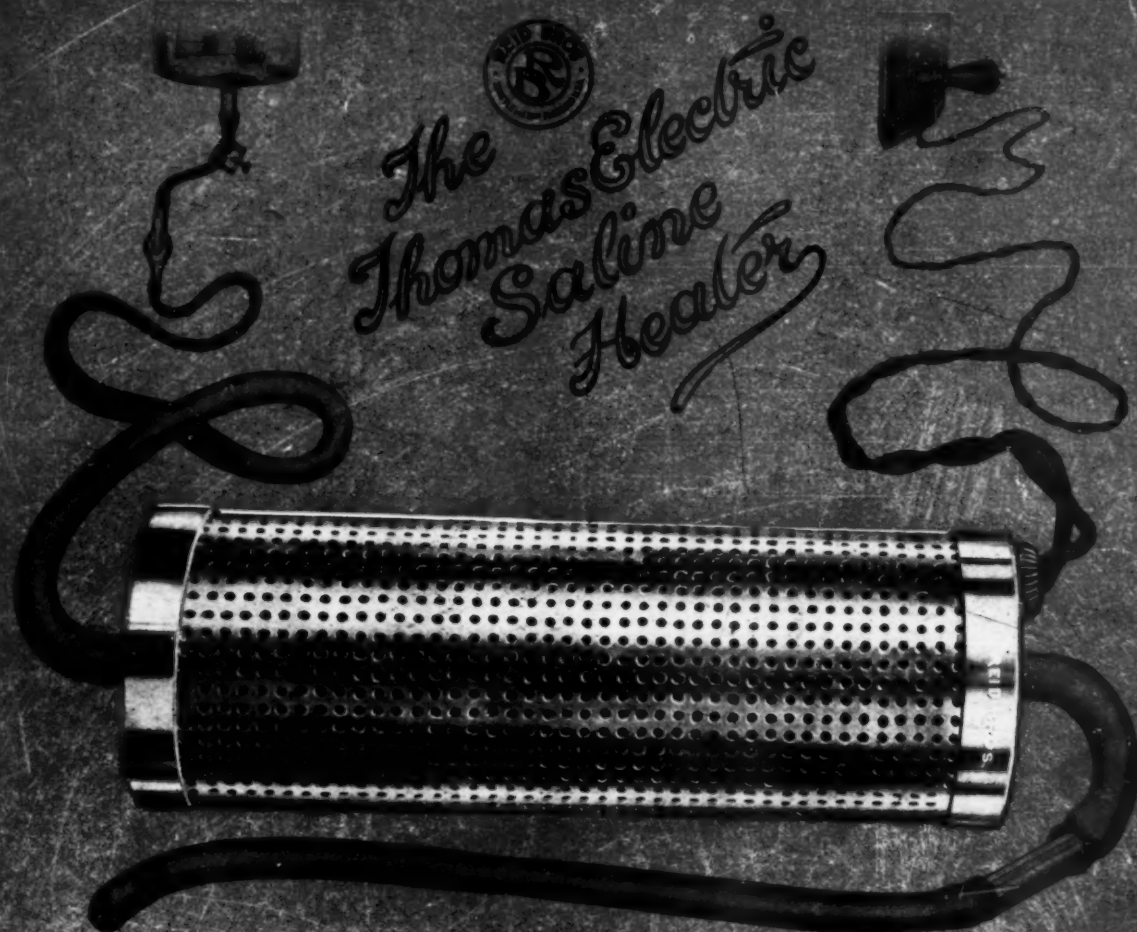
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